Grizzly Industrial, Inc.®

MODEL G0514X, G0514X2, G0514X2B, & G0514X3 EXTREME SERIES BANDSAW

OWNER'S MANUAL

(For models manufactured since 2/12)

C US
252923

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#EWTR7787 PRINTED IN TAIWAN

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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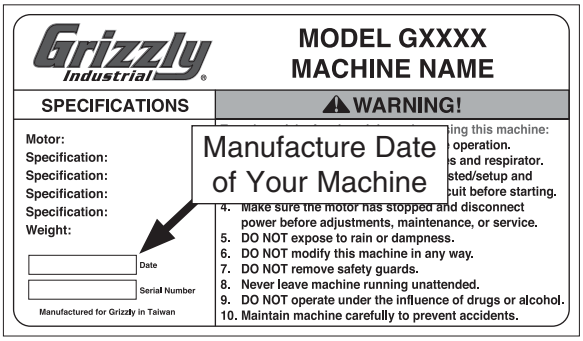
INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes errors do happen and we apologize for them.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at **www.grizzly.com**. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Fax: (800) 438-5901
E-Mail: techsupport@grizzly.com

If you have any comments regarding this manual, please write to us at the address below:

Grizzly Industrial, Inc.
C/O Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

⚠WARNING

For Your Own Safety, Read Instruction Manual Before Operating Bandsaw

a) Wear eye protection.
b) Do not remove jammed cutoff pieces until blade has stopped.
c) Maintain proper adjustment of blade tension, blade guides, and thrust bearings.
d) Adjust upper guide to just clear workpiece.
e) Hold workpiece firmly against table.

Identification (G0514X)

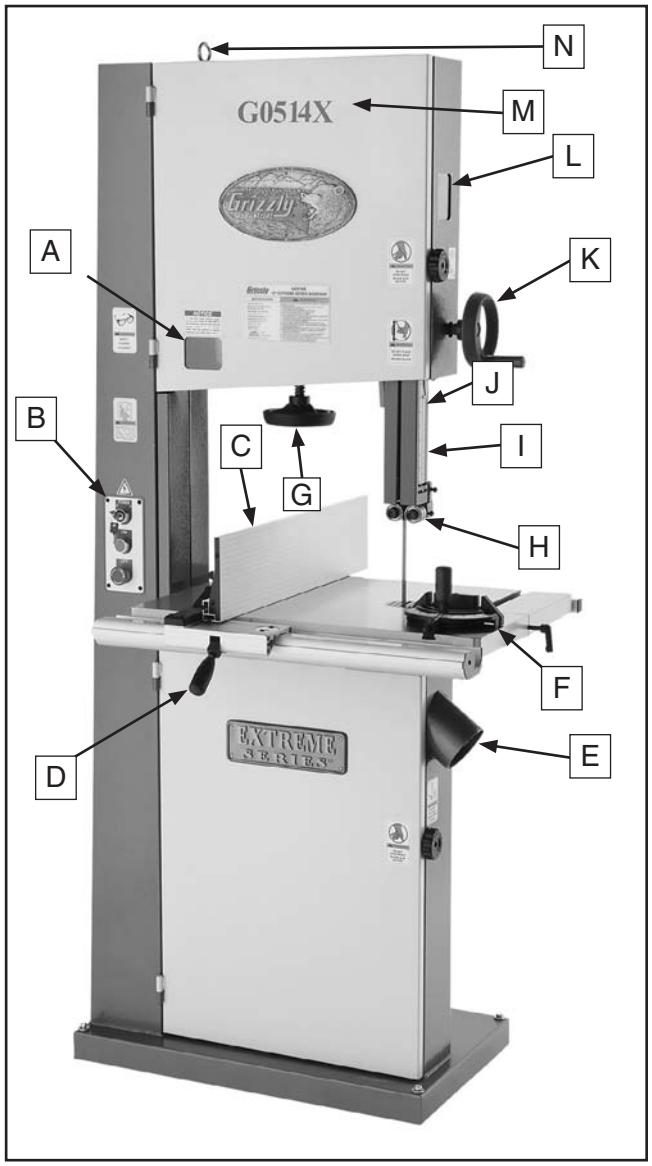


Figure 1. Bandsaw front view.

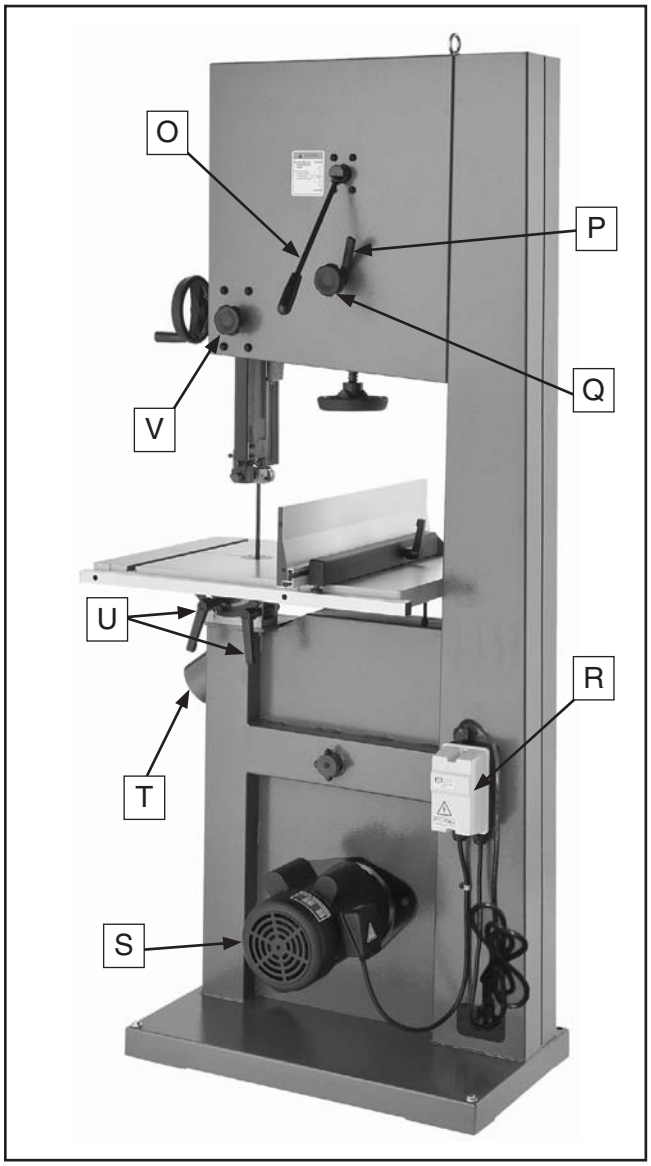


Figure 2. Bandsaw rear view.

A. Tension Indicator Window
B. Key Switch, Start and Stop Buttons
C. Resaw Fence
D. Fence Locking Lever
E. Dust Port 4"
F. Miter Gauge
G. Blade Tension Handwheel
H. Ball Bearing Blade Guides
I. Guide Post
J. Cutting Height Scale
K. Guide Post Handwheel
L. Blade Tracking Window
S. Motor
T. Dust Port 4"
M. Hinged Door
N. Lifting Eye Bolt
O. Quick Release Blade Tension Lever
P. Blade Tracking Lock Lever
Q. Blade Tracking Knob
R. Magnetic Switch
S. Motor
T. Dust Port 4"
V. Guide Post Lock Knob
U. Table Tilt Lock Handles

Identification (G0514X2/G0514X2B/G0514X3)

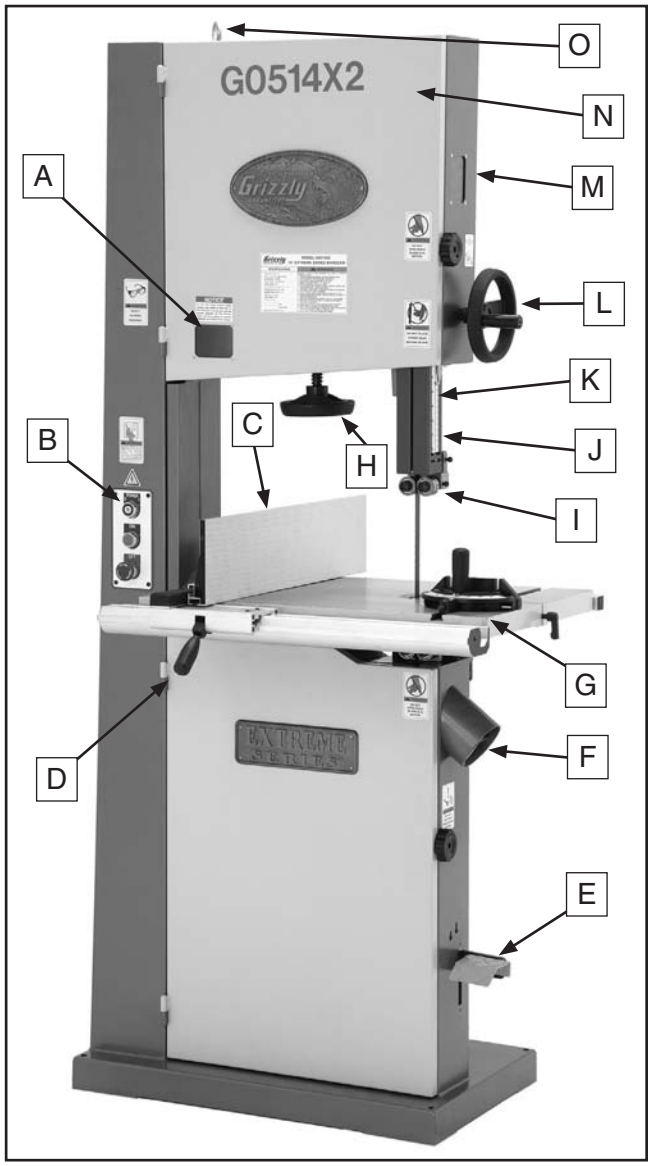


Figure 3. Bandsaw front view.

A. Tension Indicator Window
B. Key Switch, Start and Stop Buttons
C. Rip Fence
D. Fence Locking Lever
E. Foot Brake
F. Dust Port 4"
G. Miter Gauge
H. Blade Tension Handwheel
I. Ball Bearing Blade Guides
J. Guide Post
K. Cutting Height Scale

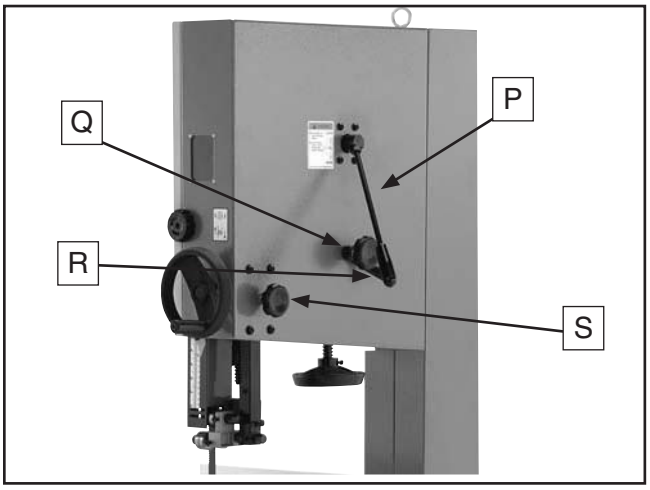


Figure 4. Rear upper controls.

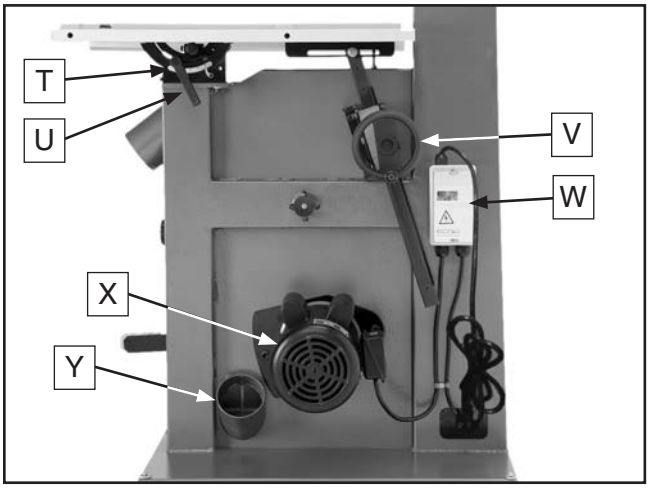


Figure 5. Table tilt controls.

L. Guide Post Handwheel
M. Blade Tracking Window
N. Hinged Wheel Cover
O. Eye Bolt
P. Quick Release Blade Tension Lever
Q. Blade Tracking Knob
R. Blade Tracking Lock Lever
S. Guide Post Lock Knob
T. Table Tilt Scale
U. Table Tilt Lock Lever
V. Table Tilt Handwheel
W. Magnetic Switch
X. Motor
Y. Dust Port 4"

MACHINE DATA SHEET

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MODEL G0514X, G0514X2, G0514X2B, G0514X3
19" 3 HP EXTREME SERIES BANDSAW

Model Number	G0514X	G0514X2	G0514X2B	G0514X3
Product Dimensions				
Weight	383 lbs.	427 lbs.		421 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	36" x 32" x 76"			
Footprint (Length x Width)	29½" x 17¾"			
Shipping Dimensions				
Type	Wood Slate Crate			
Content	Machine			
Weight	460 lbs.	480 lbs.	512 lbs.	456 lbs.
Length x Width x Height	21" x 33" x 85"			
Electrical				
Power Requirement	220V, Single-Phase, 60 Hz			220V or 440V, 3-Phase, 60 Hz
Full Load Current	12A			10A at 220V 5A at 440V
Minimum Circuit Size	15A		20A	15A at 220V 10A at 440V
Prewired	220V			
Switch	Magnetic with Thermal Overload Protection			
Switch Voltage	220V			
Cord & Plug Included	NEMA 6-15		NEMA 6-20	None
Recommended Connection Type				Locking Disconnect Switch
Motor				
Type	TEFC Capacitor Start Induction			TEFC Induction
Horsepower	3 HP			
Voltage	220V			220V/440V
Phase	Single-Phase			3-Phase
Amperage	12A			10A/5A
Speed	1725 RPM			
Cycle	60 Hz			
Power Transfer	Belt Drive			
Bearings	Shielded & Permanently Lubricated			

Model Number	G0514X	G0514X2	G0514X2B	G0514X3
Operation				
Blade Speeds	1700 & 3500 FPM			
Table Tilt	Left 5°, Right 45°			
Cutting Capacities				
Maximum Cutting Height	12"			
Maximum Capacity Left of Blade	18¼"			
Blade Information				
Standard Blade Length	143"			
Blade Width Range	⅛"–1¼"			
Blade Guides	Ball Bearings			
Guide Post Size	1 3/16"			
Guide Post Type	Square Tubing, 0.075" Wall Thickness			
Table Dimensions				
Length x Width x Thickness	26¾" x 19" x 1½"			
Floor to Table Height	37½"			
Fence Information				
Locks in Front	Yes			
Locks in Rear	No			
Adjustable for Blade Lead	Yes			
Construction				
Table	Precision-Ground Cast Iron			
Rip Fence	Cast Iron Fence with Extruded Aluminum Resaw Fence			
Base	Pre-Formed Steel			
Body	One-Piece Reinforced Steel			
Wheels	Computer-Balanced Cast Iron			
Wheel Tires	Polyurethane			
Wheel Covers	Pre-Formed Steel			
Trunnions	Steel	Cast Iron		
Paint	Powder Coated			
Other Related Information				
Foot Brake	No	Yes	No	Yes
Motor Brake	No		Yes	No
Wheel Diameter	18 7/8"			
Dust Ports	2 x 4"			
Mobile Base Model	G7315Z			
Other Specifications				
Country of Origin	Taiwan			
Warranty	1 Year			
Serial Number Location	ID Label on Top Wheel Cover			
Assembly Time	1 Hour			

SECTION 1: SAFETY

⚠WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the machine.**

⚠WARNING
Safety Instructions for Machinery

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine. Untrained users can be seriously hurt.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are not approved safety glasses.

HAZARDOUS DUST. Dust created while using machinery may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material, and always wear a NIOSH-approved respirator to reduce your risk.

WEARING PROPER APPAREL. Do not wear clothing, apparel, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to avoid accidental slips which could cause a loss of workpiece control.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

MENTAL ALERTNESS. Be mentally alert when running machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

⚠WARNING

DISCONNECTING POWER SUPPLY. Always disconnect machine from power supply before servicing, adjusting, or changing cutting tools (bits, blades, cutters, etc.). Make sure switch is in OFF position before reconnecting to avoid an unexpected or unintentional start.

APPROVED OPERATION. Untrained operators can be seriously hurt by machinery. Only allow trained or properly supervised people to use machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in wet or rainy locations, cluttered areas, around flammables, or in dark areas. Keep work area clean, dry, and well-lighted.

ONLY USE AS INTENDED. Only use machine for its intended purpose. Never modify machine for a purpose not intended by the manufacturer!

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

CHILDREN & BYSTANDERS. Keep children and bystanders a safe distance away from work area. Stop using machine if children or bystanders become a distraction.

REMOVE ADJUSTING TOOLS. Never leave adjustment tools, chuck keys, wrenches, etc. in or on machine—especially near moving parts. Verify removal before starting!

SECURING WORKPIECE. When required, use clamps or vises to secure workpiece. A secured workpiece protects hands and frees both of them to operate the machine.

FEED DIRECTION. Unless otherwise noted, feed work against the rotation of blades or cutters. Feeding in the same direction of rotation may pull your hand into the cut.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

GUARDS & COVERS. Guards and covers can protect you from accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly before using machine.

NEVER STAND ON MACHINE. Serious injury or accidental contact with cutting tool may occur if machine is tipped. Machine may be damaged.

STABLE MACHINE. Unexpected movement during operations greatly increases risk of injury or loss of control. Before starting, verify machines are stable and mobile base (if used) is locked.

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

UNATTENDED OPERATION. Never leave machine running while unattended. Turn machine ***OFF*** and ensure all moving parts completely stop before walking away.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. An improperly maintained machine increases risk of injury.

CHECK DAMAGED PARTS. Regularly inspect machine for damaged parts, loose bolts, mis-adjusted or mis-aligned parts, binding, or any other conditions that may affect safe operation. Always repair or replace damaged or mis-adjusted parts before operating machine.

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.

⚠WARNING
Additional Safety for Bandsaws

BLADE CONDITION. Do not operate with dull, cracked or badly worn blade. Dull blades require more effort to perform the cut and increase the risk of kickback. Inspect blades for cracks and missing teeth before each use.

BLADE REPLACEMENT. To avoid mishaps that could result in operator injury, make sure the blade teeth face down toward the table and the blade is properly tensioned and tracked before operating.

SMALL WORKPIECE HANDLING. If your hands slip while holding small workpieces with your fingers during a cut, serious personal injury could occur. Always support/feed the workpiece with push sticks, jig, vise, or some type of clamping fixture.

BLADE SPEED. Moving the workpiece against a blade that is not at full speed could cause the blade to grab the workpiece and draw the operator's hands into the blade. Always allow the blade to come to full speed before starting the cut.

WORKPIECE SUPPORT. If the workpiece should unexpectedly twist during cutting, it could kickback or draw the operator's hands into the blade. Always keep the workpiece flat and firm against the table when cutting. If necessary, use a jig or other work-holding device.

BLADE SUPPORT. The blade tension and guide /support bearings keep the blade straight when cutting. Always keep the blade tension and guide thrust bearings properly adjusted and positioned to avoid the blade bending or breaking with the forces of the cutting operation.

CUTTING TECHNIQUES. Plan your operation so the blade always cuts to the outside of the workpiece. DO NOT back the workpiece away from the blade while the saw is running, which could cause kickback and personal injuries. If you need to back the workpiece out, turn the bandsaw OFF and wait for the blade to come to a complete stop. DO NOT twist or put excessive stress on the blade that could damage it.

HAND PLACEMENT. Never position fingers or hands in line with the blade. If the workpiece or your hands slip, serious personal injury could occur.

FEED RATE. To avoid the risk of the workpiece slipping and causing operator injury, always feed stock evenly and smoothly. DO NOT force or twist the blade while cutting, especially when sawing small curves.

WORKPIECE MATERIAL. This machine is intended for cutting natural and man-made wood products, and laminate covered wood products. This machine is NOT designed to cut metal, glass, stone, tile, etc.

BLADE CONTROL. To avoid serious personal injury, DO NOT attempt to stop or slow the blade with your hand or the workpiece. Allow the blade to stop on its own.

UPPER BLADE GUIDE SUPPORT. To reduce the exposure of the operator to the blade and provide maximum support for the blade, keep the upper blade support and guide bearings no more than 1" above the workpiece.

⚠WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by a qualified electrician in accordance with all applicable codes and standards.

⚠WARNING

Electrocution, fire, or equipment damage may occur if machine is not correctly grounded and connected to the power supply.

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

G0514X, G0514X2, & G0514X2B:
Full-Load Current Rating at 220V ..... 12 Amps

G0514X3:
Full-Load Current Rating at 220V ..... 10 Amps
Full-Load Current Rating at 440V ..... 5 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the requirements in the following section.

⚠WARNING

Serious injury could occur if you connect the machine to power before completing the setup process. DO NOT connect to power until instructed later in this manual.

Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

⚠CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *The circuit requirements listed in this manual apply to a dedicated circuit—where only one machine will be running at a time. If this machine will be connected to a shared circuit where multiple machines will be running at the same time, consult a qualified electrician to ensure that the circuit is properly sized for safe operation.*

G0514X, G0514X2, G0514X2B Circuit Requirements

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage Range 220V–240V
Cycle ..... 60 Hz
Phase ..... Single-Phase
Circuit Size (G0514X & G0514X) ..... 15 Amps
(G0514X2B) ..... 20 Amps

G0514X, G0514X2, G0514X2B Grounding Requirements

This machine MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

For 220V operation: This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug (see following figure). The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances.

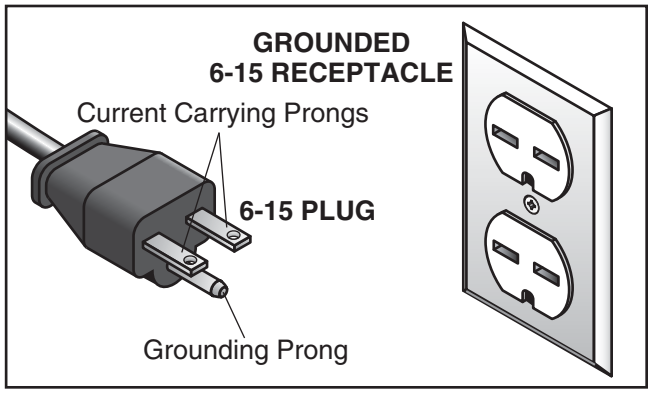


Figure 6. Typical 6-15 plug and receptacle for G0514X and G0514X2.

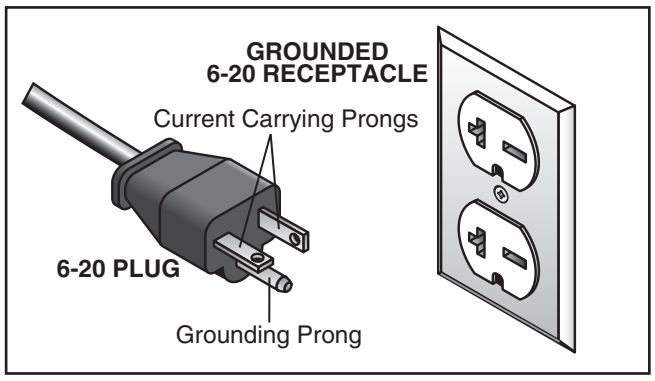
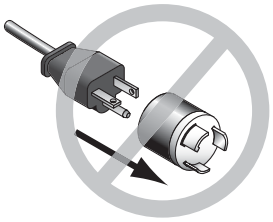


Figure 7. Typical 6-20 plug and receptacle for G0514X2B.

⚠CAUTION



No adapter should be used with the required plug. If the plug does not fit the available receptacle, or the machine must be reconnected for use on a different type of circuit, the reconnection must be made by a qualified electrician and comply with all local codes and ordinances.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

G0514X, G0514X2, G0514X2B Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must contain a ground wire, match the required plug and receptacle, and meet the following requirements:

Minimum Gauge Size .....14 AWG
Maximum Length (Shorter is Better).....50 ft.

G0514X3 Circuit Requirements 220V

This machine is prewired to operate on a 220V power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage Range 220V–240V
Cycle ..... 60 Hz
Phase 3-Phase
Power Supply Circuit ..... 15 Amps
Connection Type..Locking Disconnect Switch

G0514X3 Circuit Requirements 440V

This machine can be converted to operate on a 440V power supply (refer to **Voltage Conversion** instructions) that has a verified ground and meets the following requirements:

Nominal Voltage Range 440V–480V
Cycle ..... 60 Hz
Phase 3-Phase
Power Supply Circuit ..... 15 Amps
Connection Type..Locking Disconnect Switch

G0514X3 Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. A permanently connected machine must be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. All grounds must be verified and rated for the electrical requirements of the machine. Improper grounding can increase the risk of electric shock!

A permanently connected (hardwired) power supply is typically installed with wires running through mounted and secured conduit. A disconnecting means, such as a locking switch (see following **Figure**), must be provided to allow the machine to be disconnected (isolated) from the power supply when required. This installation must be performed by an electrician in accordance with all applicable electrical codes and ordinances.

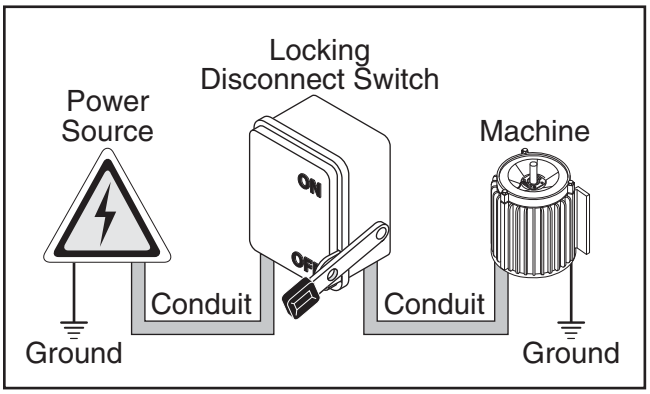


Figure 8. Typical setup of a permanently connected machine.

G0514X3 Extension Cords

Since this machine must be permanently connected to the power supply, an extension cord cannot be used.

G0514X3 Phase Converter Caution

The power from the manufactured leg may damage electrical components if connected to the wrong incoming power terminal on your machine. Only connect the manufactured leg to the L2 terminal (see **Page 72** for identification).

G0514X3 440V Conversion

The Model G0514X3 can be converted for 440V operation. This conversion job consists of disconnecting the saw from the power source, changing the connections on the magnetic switch and rewiring the motor for 440V operation.

The Model G0514X3 440V Conversion Kit (Part #P0514X3161AV2) for this procedure can be purchased by calling Grizzly Customer Service at (800) 523-4777.

All wiring changes must be performed by an electrician or qualified service personnel before the bandsaw is connected to the power source. If, at any time during this procedure you need help, call Grizzly Tech Support at (570) 546-9663.

To rewire the Model G0514X3 for 440V operation:

1. DISCONNECT BANDSAW FROM POWER!

2. Remove the magnetic switch cover, then disconnect and remove the 220V magnetic switch (**Figure 9**).

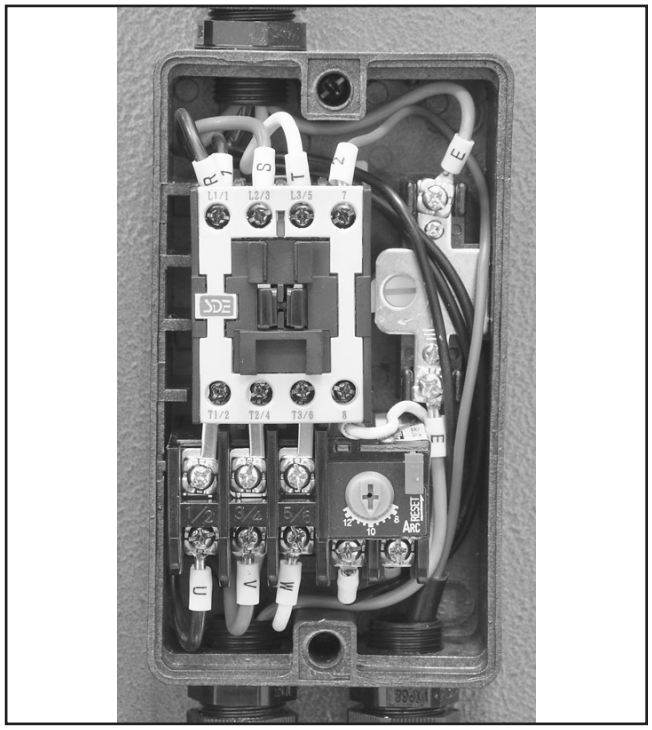


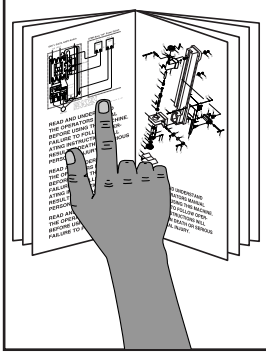
Figure 9. 220V magnetic switch

3. Install the 440V magnetic switch and wire it according to the **G0514X3 Wiring Diagram** on **Page 72.**

4. Remove the motor junction box cover, rewire the motor as shown on the diagram located inside the junction box, then re-install the cover.

   Note: *The reference motor wiring diagram on **Page 72** was current at the time of printing, but always use the wiring diagram provided inside the motor junction box, as it will reflect any changes to the motor shipped with your machine.*

SECTION 3: SETUP



⚠WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!

⚠WARNING

Wear safety glasses during the entire setup process!

⚠WARNING

This machine and its components are very heavy. Get lifting help or use power lifting equipment such as a forklift to move heavy items.

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

Description	Qty
• Safety Glasses	1
• Cleaner/Degreaser	As Needed
• Disposable Shop Rags	As Needed
• Forklift/Strap or Chain w/Lifting Hook (Each component rated for at least 1000 lbs)	1 Each
• 1x4 & 2x4 Shims (Optional)	1 Each
• Additional People	1
• Straightedge	1
• Dust Collection System	1
• Dust Hose 4"	1
• Hose Clamps 4"	2

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, *please call us immediately at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.

⚠WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.

G0514X Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Crate Contents (Figure 10 & 11):	**Qty**
A. Bandsaw (not shown)	1
B. Table	1
C. Miter Gauge	1
D. Back Square Tube	1
E. Resaw Fence	1
F. Front Rail	1
G. Fence Assembly	1

Hardware and Tools (not shown):	**Qty**
• Bandsaw Blade 6 TPI Hook 143"	1
• Eye Bolt M10-1.5 (may be installed)	1
• Flat Washers 8mm (Table, Fence)	5
• Lock Washers 8mm (Table)	4
• Hex Bolts M8-1.25 x 16 (Table)	4
• Hex Bolt M8-1.25 x 90 (Pos. Stop)	1
• Hex Nuts M8-1.25 (Pos. Stop, Fence)	2
• Table Pin	1
• Table Insert	1
• Cap Screws M6-1 x 16 (Fence)	2
• Hex Bolts M6-1 x 20 (Fence)	2
• Fence Handle M8-1.25 x 22 (Fence)	1
• Lock Washers 6mm (Fence)	2
• Flat Washers 6mm (Fence)	2
• Rail Pad M6 x 18 (Fence)	1
• Hex Nut M6-1 (Fence)	1
• Lock Handle M8-1.25 x 44 (Fence)	1
• Moving Plate (Fence)	1
• Hex Wrench 5mm & 8mm	1 Ea
• Open End Wrench 10 x 13mm	1

NOTICE

If you cannot find an item on this list, carefully check the machine and the packaging materials. Some of these items may be preinstalled for shipping or become misplaced during unpacking.

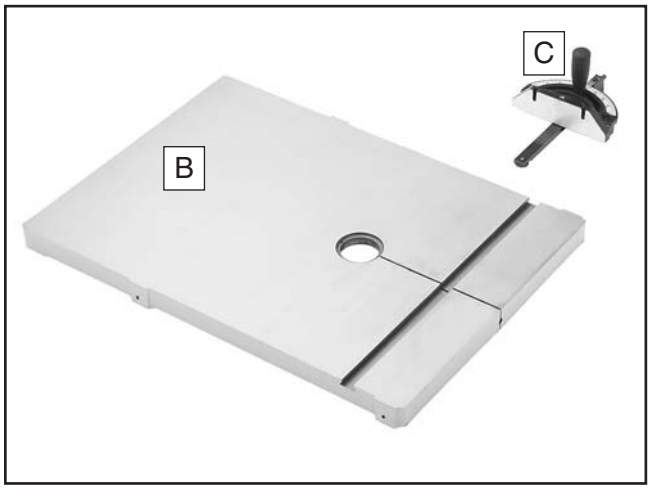


Figure 10. Bandsaw components.

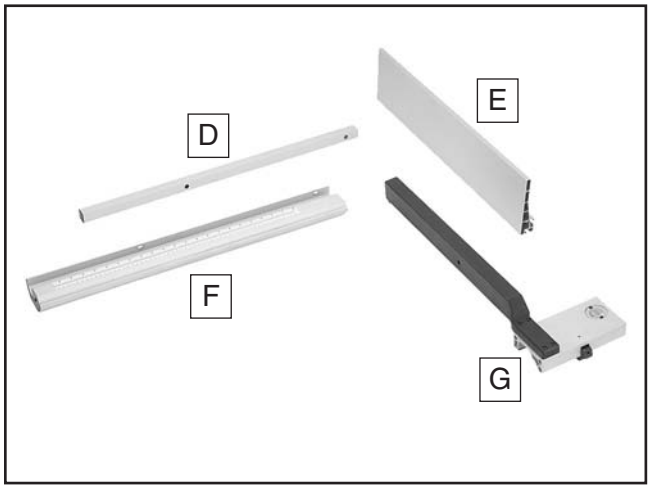


Figure 11. Fence components.

G0514X2 & G0514X3 Inventory

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Crate Contents (Figure 12–14):	**Qty**
A. Bandsaw (not shown)	1
B. Table	1
C. Miter Gauge	1
D. Back Square Tube	1
E. Resaw Fence	1
F. Front Rail	1
G. Fence Assembly	1
H. Sliding Plate	1
I. Table Tilt Handwheel	1
J. Guide Post Handwheel	1

Hardware and Tools (not shown):	**Qty**
• Bandsaw Blade 6 TPI Hook 143"	1
• Eye Bolt M10-1.5 (may be installed)	1
• Flat Washers 8mm (Table, Sliding Plate, Fence)	7
• Lock Washers 8mm (Table)	4
• Hex Bolts M8-1.25 x 25 (Table)	4
• Hex Bolt M8-1.25 x 55 (Sliding Plate)	1
• Lock Nut M8-1.25 (Sliding Plate)	1
• Cap Screws M6-1 x 12 (Sliding Plate)	2
• Hex Bolt M8-1.25 x 90 (Pos. Stop)	1
• Hex Nuts M8-1.25 (Pos. Stop, Fence)	2
• Table Pin	1
• Table Insert	1
• Cap Screws M6-1 x 16 (Fence)	2
• Hex Bolts M6-1 x 20 (Fence)	2
• Fence Handle M8-1.25 x 22 (Fence)	1
• Rail Pad M6 x 18 (Fence)	1
• Hex Nut M6-1 (Fence)	1
• Lock Handle M8-1.25 x 44 (Fence)	1
• Moving Plate (Fence)	1
• Lock Washers 6mm (Fence, Sliding Plate)	4
• Flat Washers 6mm (Fence, Sliding Plate)	4
• Hex Wrench 5mm & 8mm	1 Ea
• Open End Wrench 10 x 13mm	1

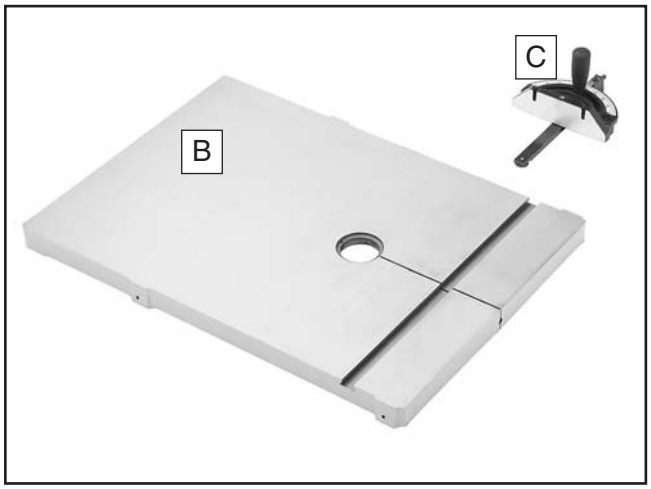


Figure 12. Bandsaw components.

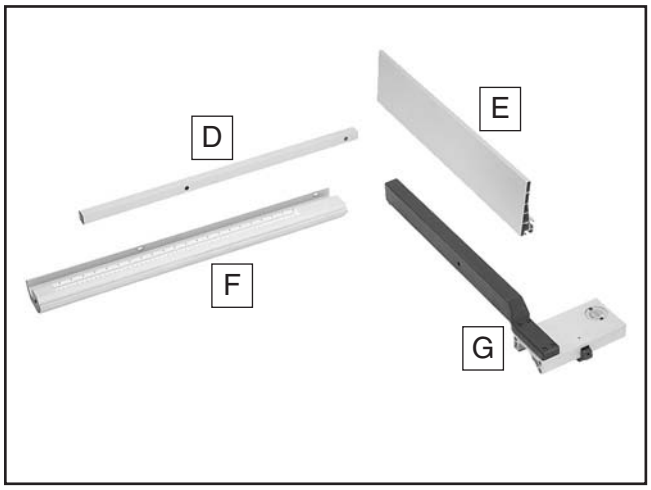


Figure 13. Fence components.

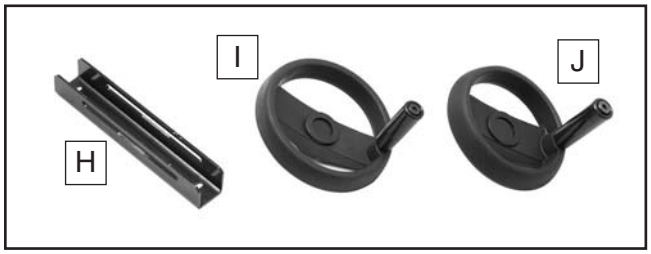


Figure 14. Table tilt components.

NOTICE

If you cannot find an item on this list, carefully check the machine and the packaging materials. Some of these items may be preinstalled for shipping or become misplaced during unpacking.

G0514X2B

The following is a description of the main components shipped with your machine. Lay the components out to inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

Crate Contents (Figure 15–17): **Qty**

A. Bandsaw (not shown) 1
B. Table 1
C. Miter Gauge 1
D. Standard Fence Assembly 1
E. Resaw Fence 1
F. Resaw Fence Lock Lever M8-1.25 x 45 1
G. Resaw Fence T-Bar 1
H. Front Square Rail 1
I. Sliding Plate 1
J. Table Tilt Handwheel 1
K. Guide Post Handwheel 1

Hardware and Tools (not shown): **Qty**

- Bandsaw Blade 6 TPI Hook 143" 1
- Eye Bolt M10-1.5 (may be installed) 1
- Flat Washers 8mm (Table, Sliding Plate, Fence) 8
- Lock Washers 8mm (Table) 4
- Hex Bolts M8-1.25 x 25 (Table) 4
- Hex Bolt M8-1.25 x 55 (Sliding Plate) 1
- Lock Nut M8-1.25 (Sliding Plate) 1
- Cap Screws M6-1 x 12 (Sliding Plate) 2
- Hex Bolt M8-1.25 x 90 (Pos. Stop) 1
- Hex Nuts M8-1.25 (Pos. Stop, Fence) 2
- Table Pin 1
- Table Insert 1
- Cap Screws M6-1 x 16 (Fence) 2
- Hex Bolts M6-1 x 20 (Fence) 2
- Fence Handle M8-1.25 x 22 (Fence) 1
- Rail Pad M6 x 18 (Fence) 1
- Hex Nut M6-1 (Fence) 1
- Lock Handle M8-1.25 x 44 (Fence) 1
- Moving Plate (Fence) 1
- Lock Washers 6mm (Fence, Sliding Plate) .4
- Flat Washers 6mm (Fence, Sliding Plate) ... 4
- Hex Wrench 5mm & 8mm ..... 1 Ea
- Open End Wrench 10 x 13mm 1

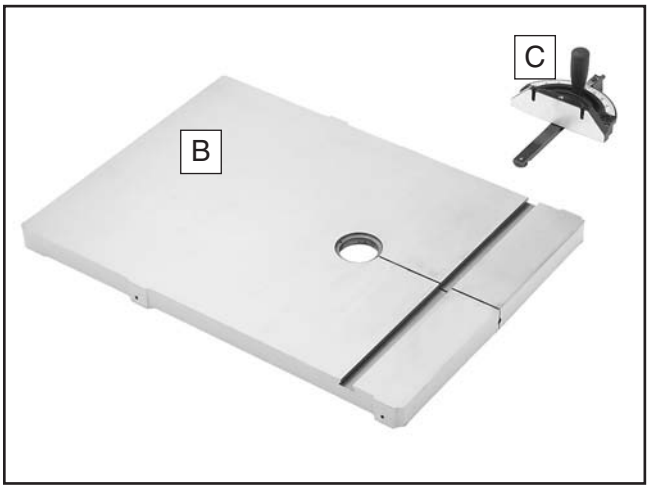


Figure 15. Bandsaw components.

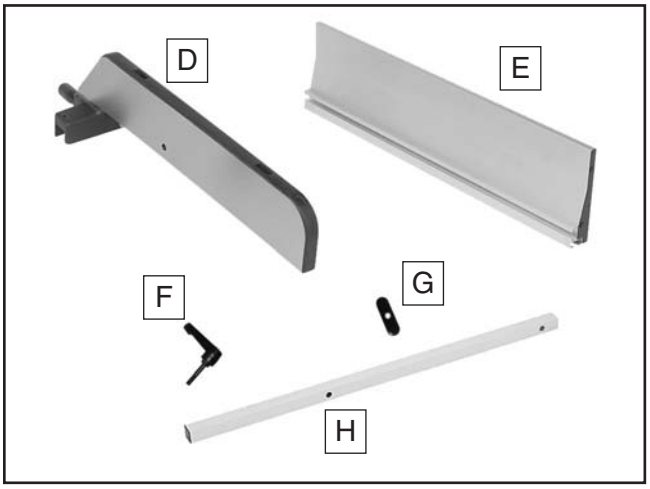


Figure 16. Fence components.

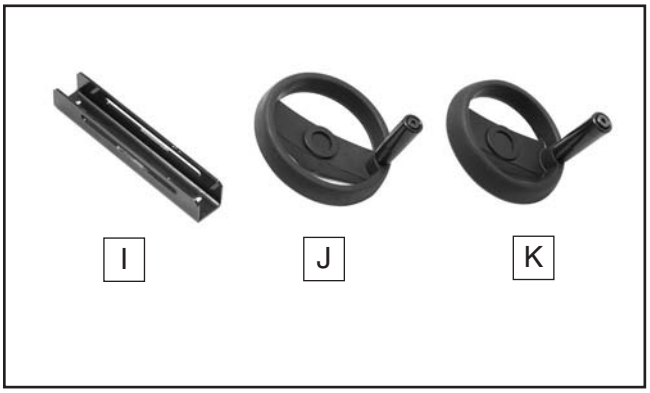
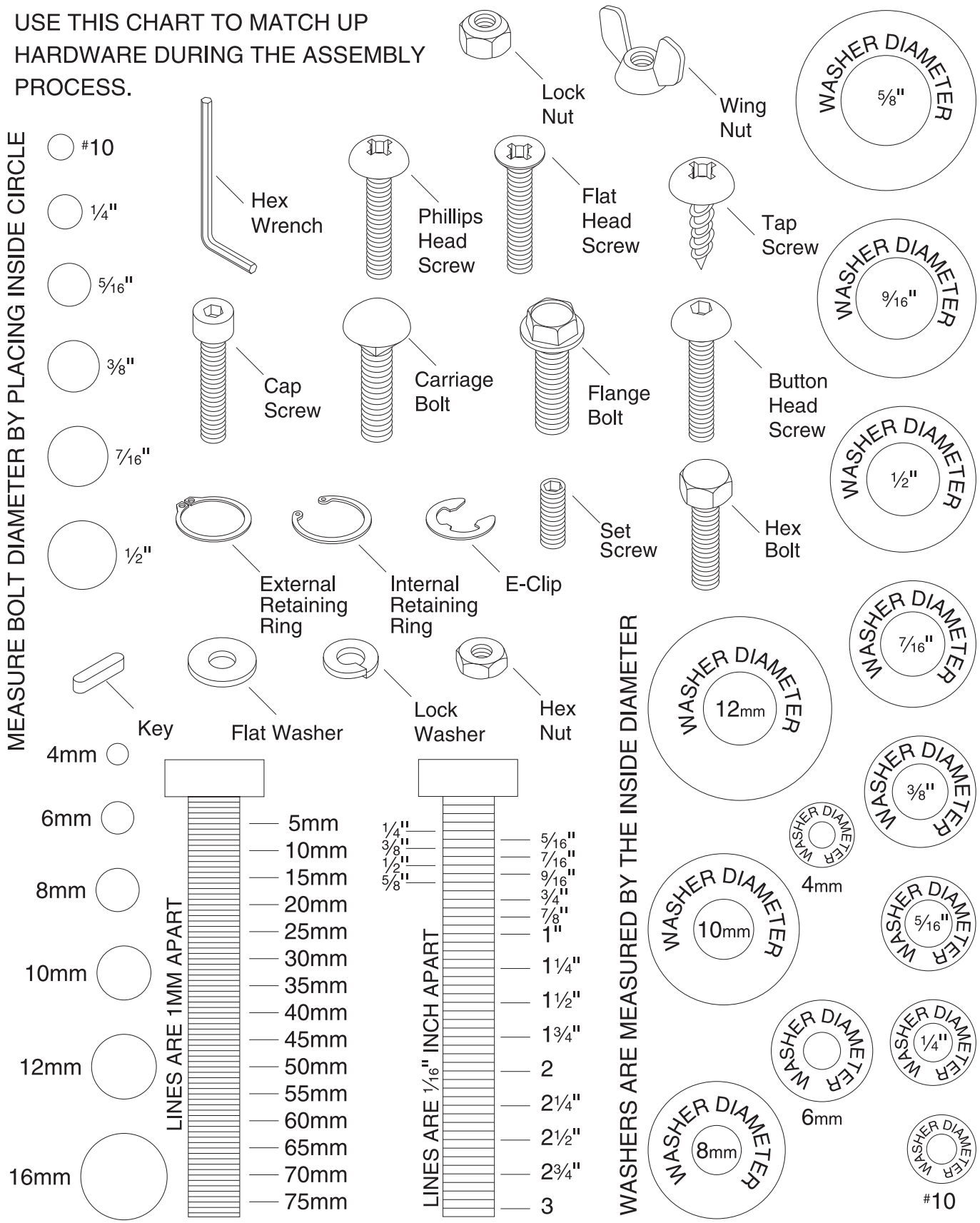


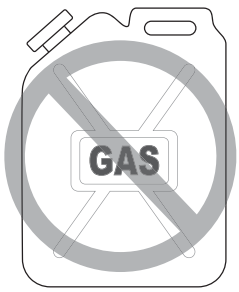
Figure 17. Foot brake and table tilt components.

Hardware Recognition Chart



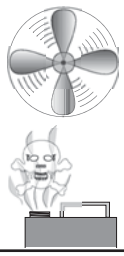
Clean Up

The unpainted surfaces are coated with a waxy oil to prevent corrosion during shipment. Remove this protective coating with a solvent cleaner or degreaser. For thorough cleaning, some parts must be removed. **For optimum performance, clean all moving parts or sliding contact surfaces.** Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.



⚠WARNING

Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. DO NOT use these products to clean the machinery.



⚠CAUTION

Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.

Site Considerations

Floor Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some residential floors may require additional reinforcement to support both the machine and operator.

Placement Location

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables or other machinery when establishing a location for your new machine. See **Figure 18** for the minimum working clearances.

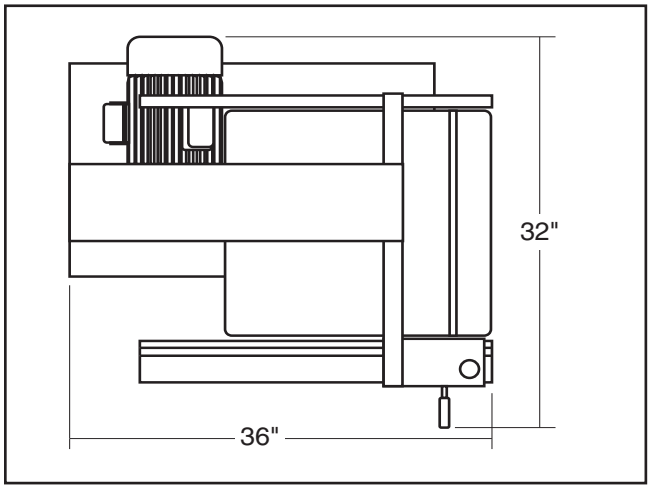
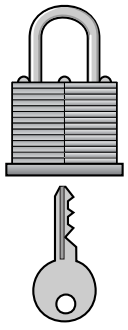


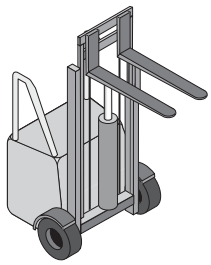
Figure 18. Minimum working clearances.



⚠CAUTION

Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.

Moving & Placing Base Unit



⚠WARNING

This bandsaw is a heavy machine. Serious personal injury may occur if safe moving methods are not used. Get assistance and use power equipment to move the shipping crate and remove the machine from the crate.

Special care should be taken when moving this bandsaw. Only use one of the following methods to lift or move this bandsaw.

To move and place the bandsaw using the eye bolt:

1. Remove the crate from the shipping pallet, then unbolt the bandsaw from the pallet.

2. Install the eye bolt shown (see **Figure 19**), make sure it is threaded all the way in**,** then place the lifting hook through the eye bolt and lift the bandsaw slowly with a forklift.

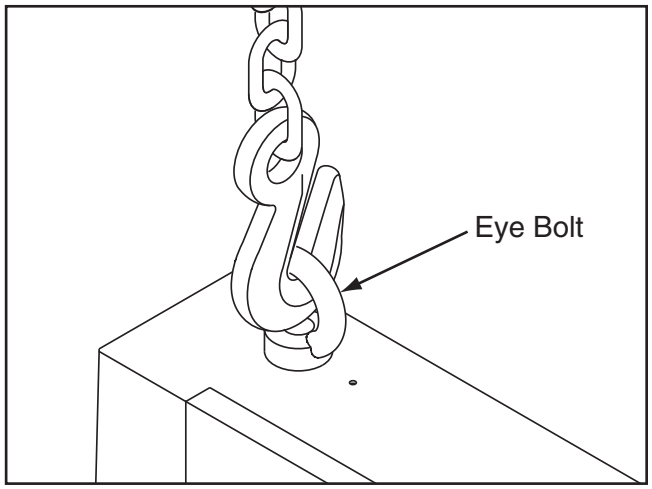


Figure 19. Lifting the bandsaw.

3. Remove the pallet and slowly set the bandsaw into position.

To move and place the bandsaw using wood shims:

1. Move the crate to the prepared location, then remove the crate from the shipping pallet.

2. Unbolt the bandsaw from the pallet.

3. Carefully place the forklift forks under the head and install a 1x4 shim between the head and the left fork and a 2x4 shim between the head and right fork so the bandsaw is level, as shown in **Figure 20**.

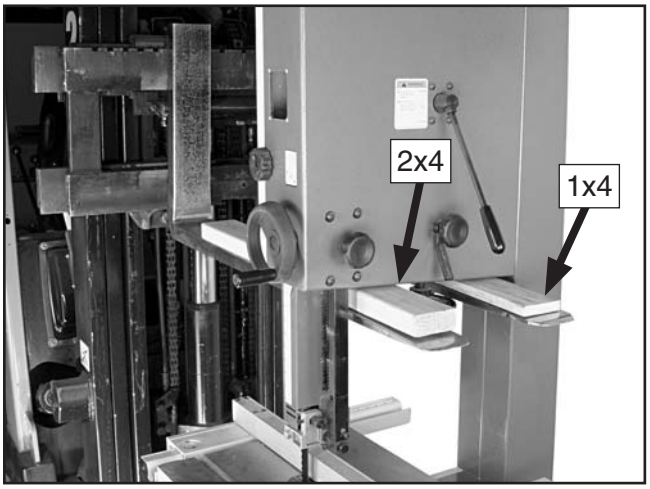


Figure 20. Example of lifting bandsaw with forklift using wood shims.

4. Lift the bandsaw off of the pallet, remove the pallet, then slowly set the bandsaw into position.

Note: *If you are concerned about your forklift forks hitting the tension handwheel, remove the handwheel before positioning the forks, then reinstall it after placing.*

Mounting

We recommend mounting your new machine to the floor. Because floor materials may vary, floor mounting hardware is not included. You may also mount your machine to a mobile base that has wheel locking or wheel retracting capabilities that keeps the mobile base from rolling when not in use.

Bolting to Concrete Floors

Lag shield anchors with lag bolts (**Figure 21**) and anchor studs (**Figure 22**) are two popular methods for anchoring an object to a concrete floor. We suggest you research the many options and methods for mounting your machine and choose the best that fits your specific application.

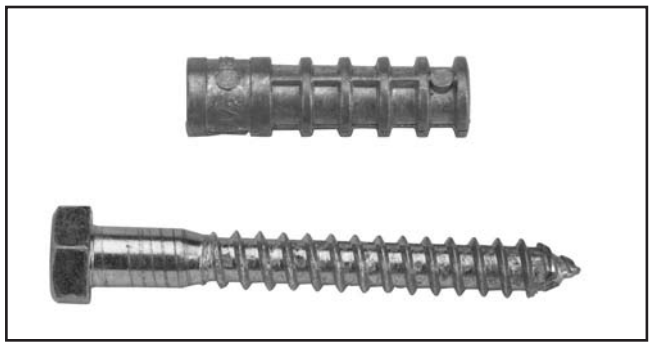


Figure 21. Typical lag shield anchor and bolt.

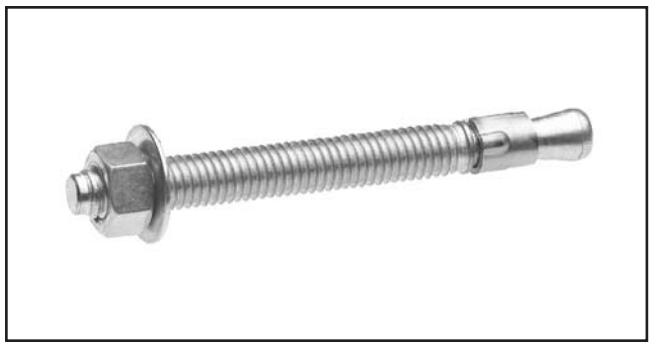


Figure 22. Typical anchor stud.

NOTICE

Anchor studs are stronger and more permanent alternatives to lag shield anchors; however, they will stick out of the floor, which may cause a tripping hazard if you decide to move your machine.

Assembly

Guide Post Handwheel

Secure the guide post handwheel onto the handwheel shaft flat with the included set screw (see **Figure 23**).

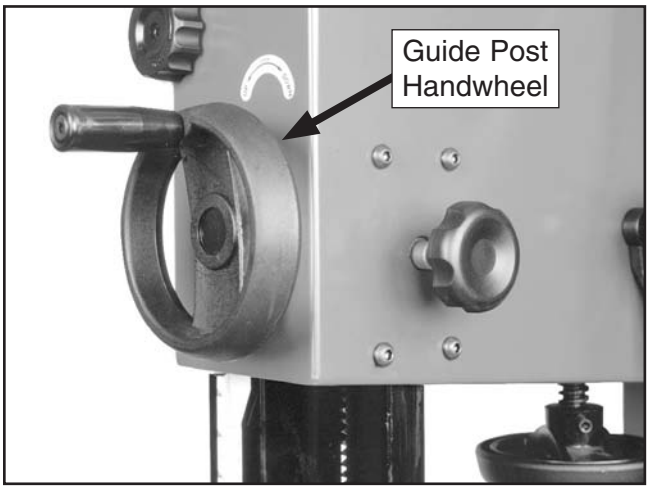


Figure 23. Guide post handwheel installed.

Table

The table is heavy and requires two people to lift it onto the trunnions. Remove the saw blade to make table installation easier.

To install the table:

1. Loosen blade tension by rotating the quick release tension lever clockwise, as shown in **Figure 24**.

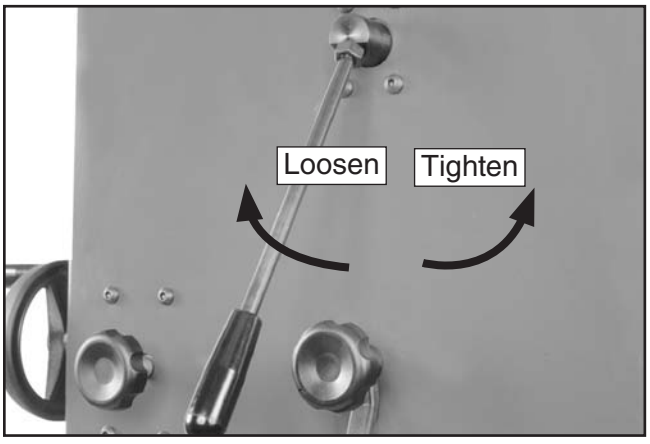


Figure 24. Quick release tension lever.

2. Adjust the upper and lower blade guides away from the blade. Refer to **Adjusting Blade Guide Bearings** on **Page 33** for more details.

⚠CAUTION

All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling saw blades.

3. With the help of another person, lift the table onto the trunnions.

4. **Model G0514X:** Secure the table to the trunnions, as shown in **Figure 25** with the (4) M8-1.25 x 16 hex bolts, 8mm lock washers, and 8mm flat washers.

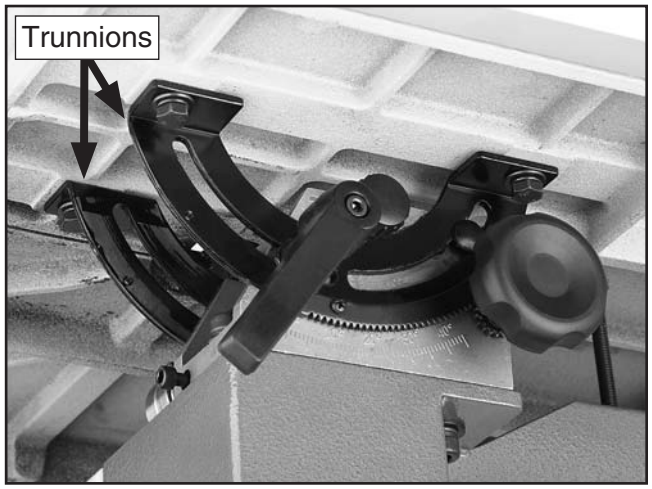


Figure 25. Mounting the table.

Model G0514X2, G0514X2B, G0514X3: Secure the table to the trunnions with the (4) M8-1.25 x 25 hex bolts, 8mm lock washers, and 8mm flat washers.

5. With the blade teeth pointing downward, and toward the front of the machine, slide the blade through the table slot.

—If the table insert is preinstalled, remove it before changing the blade.

6. Slide the blade through the upper and lower blade guides, and mount it over the upper and lower wheels.

7. Tighten the quick release tension lever, then install the table insert and table pin.

8. Keep the upper and lower blade guides adjusted away from the blade until the blade tracking and tension have been adjusted.

Table Tilt Assembly (G0514X2, G0514X2B, & G0514X3 Only)

1. Tilt the table up and secure the table lock lever.

2. Remove the hex bolt, hex nut and flat washers installed on the geared table tilt tube (see **Figure 26**).

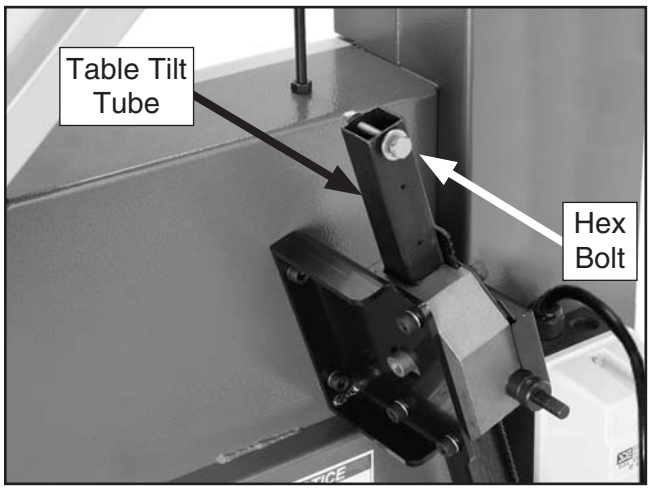


Figure 26. Table tilt assembly.

3. Secure the sliding plate to the table tilt tube with the fasteners removed in **Step 2**, making sure the hole closest to the edge of the plate is installed on the left side of the table—facing the rear of the bandsaw.

4. Lower the table onto the positive stop bolt.

5. Secure the table tilt handwheel onto the flat part of the handwheel shaft with the included cap screw (see **Figure 27**).

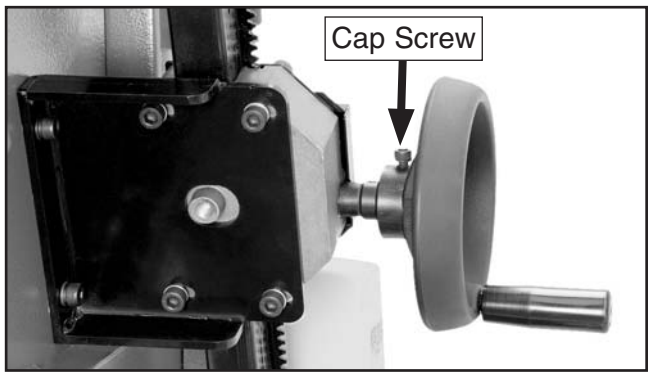


Figure 27. Table tilt handwheel installed.

6. Raise the sliding plate up and secure it to the bottom of the table with the hex bolts and flat washers, as shown in **Figure 28**.

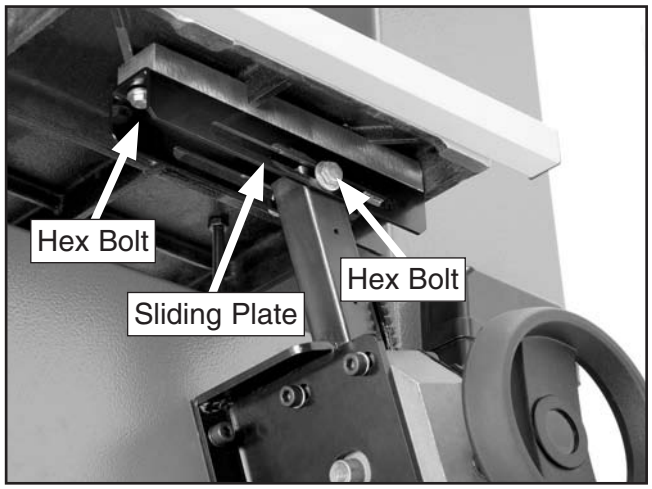
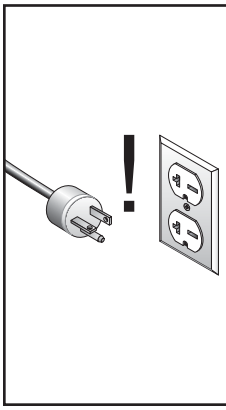


Figure 28. Sliding plate secured to table.

Blade Tracking



⚠WARNING

Serious personal injury can occur if the machine starts while your hand is touching the bandsaw wheel during tracking adjustments. Disconnect power from the bandsaw before performing blade tracking adjustments.

The blade tracking is primarily affected by the tilt of the upper wheel, also known as "Center Tracking"; and the alignment of both wheels, also known as "Coplanar Tracking." (For Coplanar Tracking, see the **Wheel Alignment** instructions on **Page 65**.)

The wheels on this bandsaw were aligned at the factory, so Center Tracking is the only adjustment that needs to be performed when the saw is new.

To center track the blade:

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure the upper and lower blade guides are adjusted away from the blade.

3. Engage the quick tension lever and turn the blade tension handwheel until the tension scale (**Figure 29**) reads between 4 and 6.

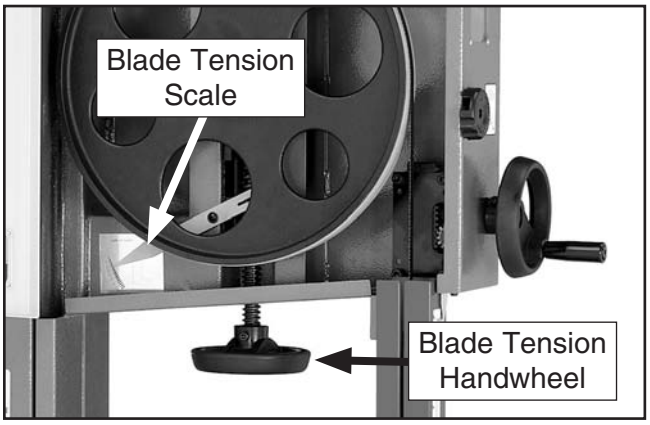


Figure 29. Blade tensioning controls.

4. Spin the upper wheel by hand at least three times and watch how the blade rides on the crown of the wheel. Refer to **Figure 30** for an illustration of this concept.

   —**If the blade rides in the center of the upper wheel and is centered on the peak of the wheel crown**, then the bandsaw is already tracked properly and no further adjustments are needed at this time.

   —**If the blade does not ride in the center of the upper wheel and is not centered on the peak of the wheel crown,** then continue with the following steps.

⚠CAUTION

The cast iron spokes may have sharp edges and the blade teeth may extend beyond the edge of the wheel, creating a laceration hazard. Be careful when turning the wheels by hand.

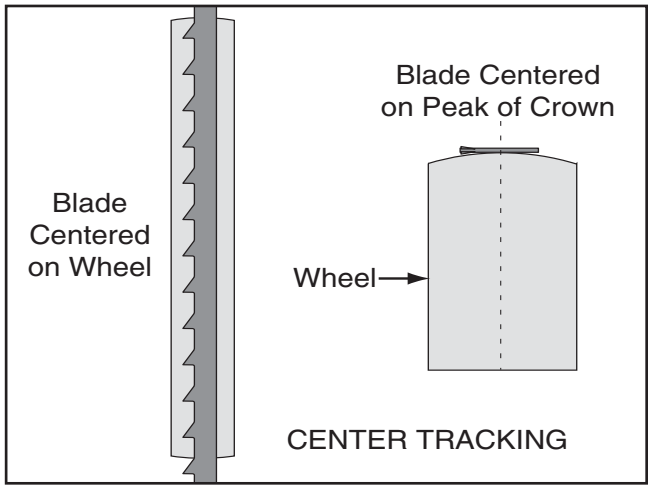


Figure 30. Center tracking profiles.

5. Loosen the lock lever (**Figure 31**) so that the blade tracking knob can rotate.

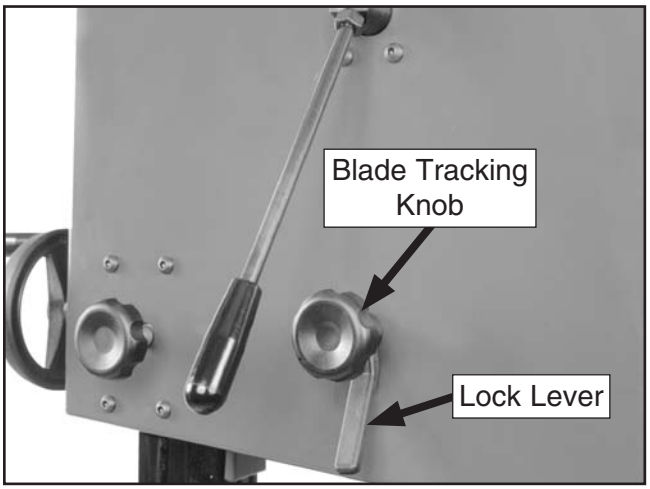


Figure 31. Blade tracking controls.

6. Spin the upper wheel with one hand and rotate the tracking control knob with the other hand to make sure the blade rides in the center of the bandsaw wheel tire.

7. Tighten the tracking control lock knob and close the upper wheel cover.

For the best performance from your saw, regularly maintain proper tracking of the blade.

NOTICE

Changes in the blade tension may change the blade tracking.

Positive Stop

The positive stop allows the table to be quickly and accurately returned to the horizontal (0˚) position after being adjusted to a different angle.

Installing Positive Stop

1. DISCONNECT BANDSAW FROM POWER!

2. Unlock the table tilt lock lever, tilt the table to access the positive stop bolt installation location, then lock the lever.

3. Thread the M8-1.25 hex nut halfway onto the M8-1.25 x 90 hex bolt (this is the positive stop bolt).

4. Thread the positive stop bolt into the threaded hole on bandsaw body, as shown in **Figure 32**.

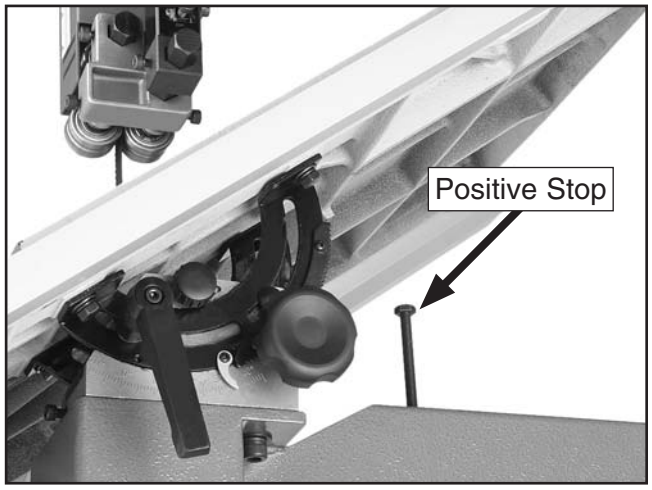


Figure 32. Installed positive stop bolt.

5. Lower the table onto the positive stop bolt.

Positioning Positive Stop

1. DISCONNECT BANDSAW FROM POWER!

2. Adjust the blade tension until the mark on the blade tension scale is between 4 and 6.

3. Loosen the hex nut that locks the positive stop bolt in place.

4. Raise the guide post and place a machinist's square on the table next to the side of the blade, as illustrated in **Figure 33**. Adjust the table square with the blade, then secure it with the table tilt lock lever (see **Figure 71** on **Page 42**).

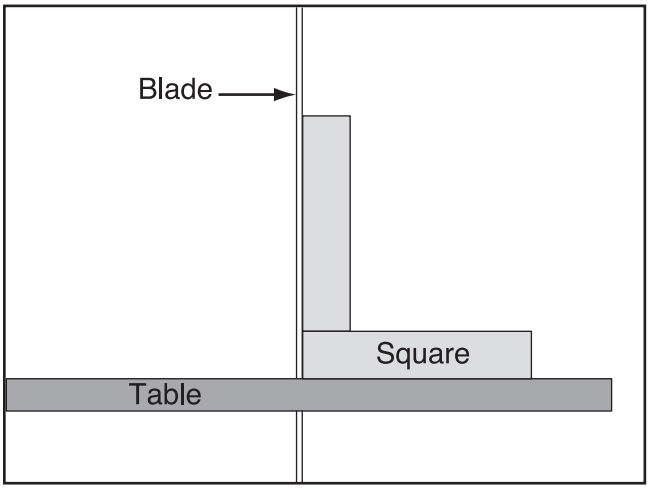


Figure 33. Squaring table to blade.

5. Adjust the positive stop bolt against the table and secure it by tightening the hex nut against the trunnion bracket.

6. Check the adjustment for accuracy once you have tightened the hex nut.

7. Loosen the screw on the pointer, but do not remove it.

8. Align the tip of the pointer with the 0˚ mark on the table tilt scale.

9. Tighten the screw on the pointer so that the pointer is locked in place.

Dust Collection

⚠CAUTION

DO NOT operate this bandsaw without an adequate dust collection system. This saw creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

Recommended CFM at Dust Port: 400 CFM
Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect a dust collection hose:

1. Fit the 4" dust hose over each dust port and secure them in place with a hose clamp (see **Figure 34**).

2. Tug the hoses to make sure they do not come off. **Note:** *A tight fit is necessary for proper performance.*

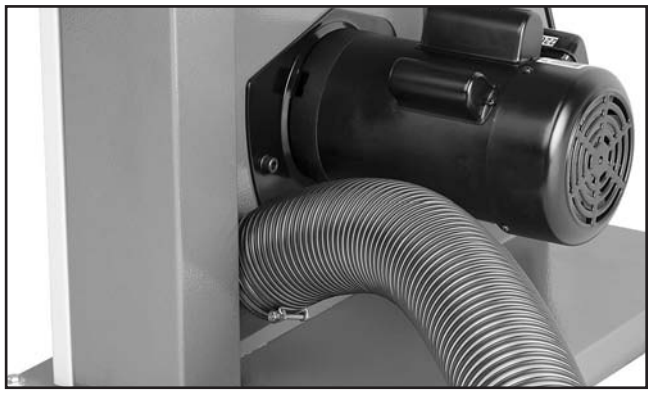


Figure 34. Dust hose attached to bottom dust port.

Installing Fence (G0514X, -X2, X3)

To install the fence:

1. Attach the back square tube to the table with the (2) M6-1 x 16 cap screws as shown in **Figure 35**.

2. Attach the front rail with the (2) M6-1 x 20 hex bolts, 6mm lock washers, and 6mm flat washers, as shown in **Figure 35**.

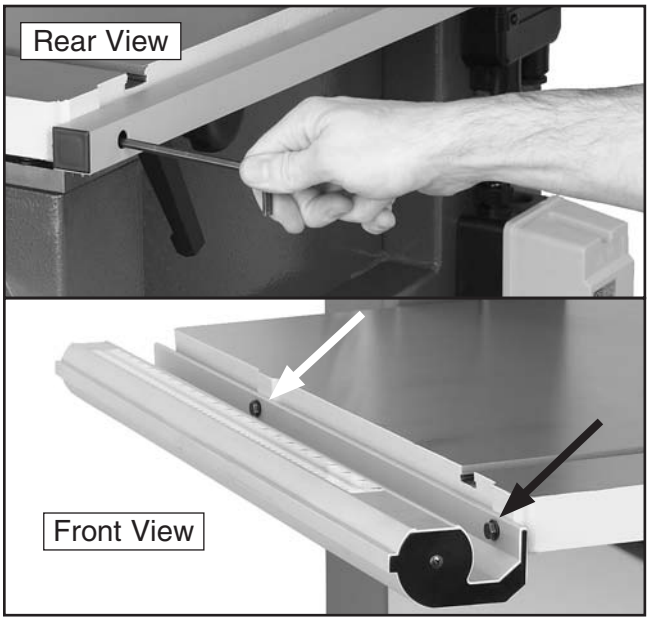


Figure 35. Rail installation.

3. Install an M8-1.25 hex nut on the fence handle, then thread the handle into the fence assembly, as shown in **Figure 36**. Tighten the hex nut against the fence pivot block to secure the handle.

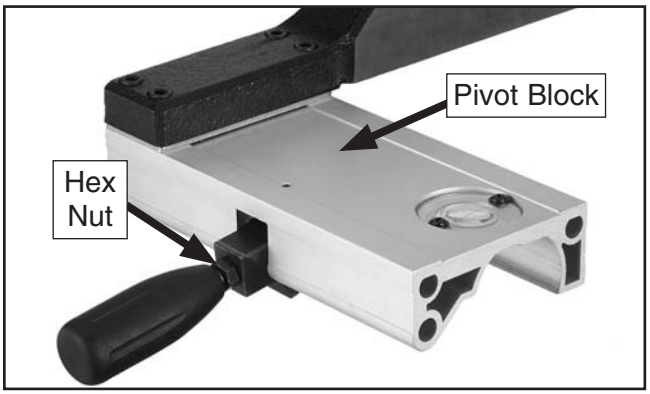


Figure 36. Handle installed on fence assembly.

4. Thread the M6-1 hex nut onto the rail pad, then thread the rail pad into the fence (see **Figure 37**).

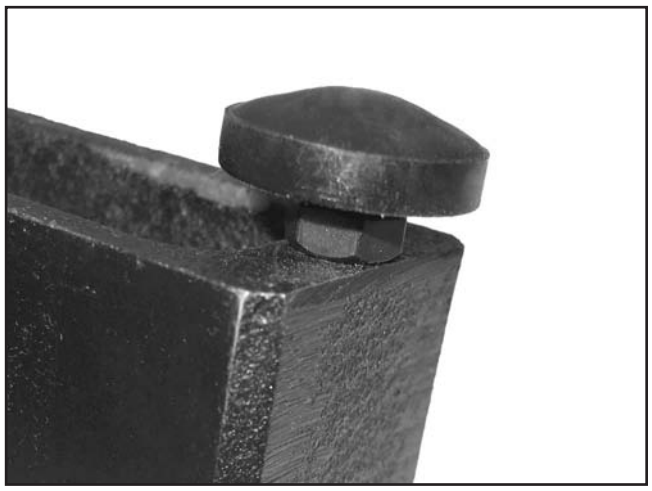


Figure 37. Installed rail pad.

5. Place the 8mm flat washer on the lock handle, slide it through the hole in the fence, then thread the moving plate onto the end of the lock handle threads.

6. Slide the resaw fence over the moving plate, as shown in **Figure 38**, so the moving plate fits inside the channel of the resaw fence.

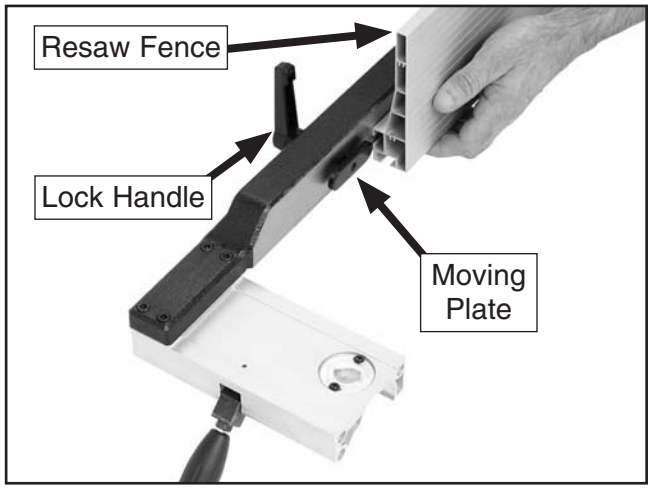


Figure 38. Attaching resaw fence to standard fence.

7. Tighten the lock handle.

8. Pull the fence handle up and place the fence assembly on the fixed rail as, shown in **Figure 39**.

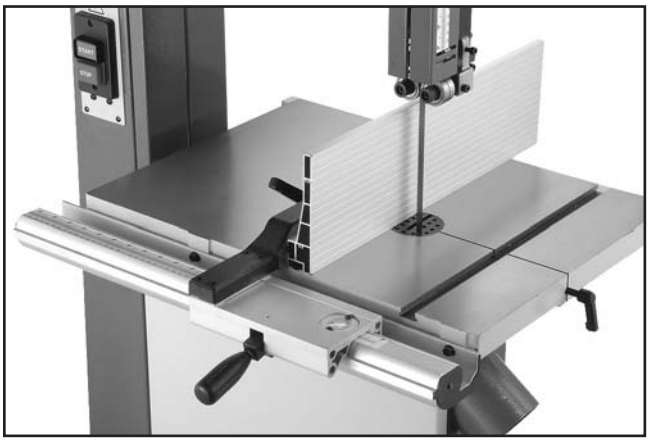


Figure 39. Correctly installed fence.

9. Push the fence handle down to lock the fence assembly in place.

10. Adjust the rail pad until there is an even gap between the bottom of the fence and the table, then tighten the hex nut against the fence.

Installing Fence (G0514X2B)

To install the fence:

1. Attach the rail plates to the front square rail with the three M6-1 x 20 cap screws, 6mm lock washers, and 6mm flat washers (see **Figure 40**).

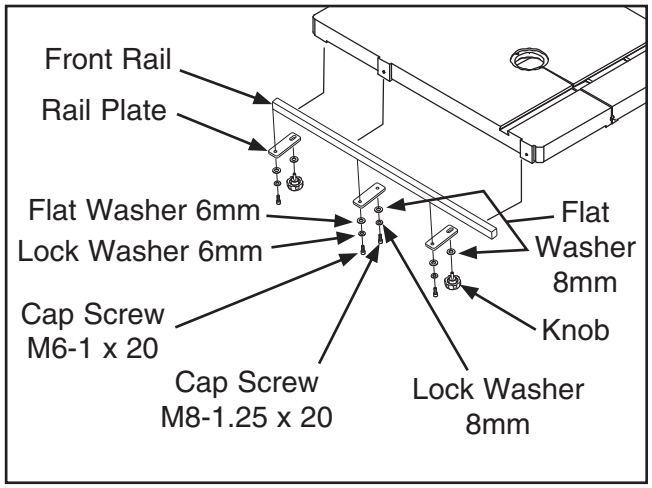


Figure 40. Installing front rail onto table.

2. Attach the outer two rail plates with the round and elongated mounting holes on the outer part of the table bottom with two M8-1.25 x 20 knobs and 8mm flat washers.

3. Attach the remaining rail plate with the round mounting holes using an M8-1.25 x 20 cap screw, 8mm lock washer and 8mm flat washer (**Figure 40**).

4. Thread the fence handle into the fence, then tighten the hex nut against the fence pivot block (see **Figure 41**).

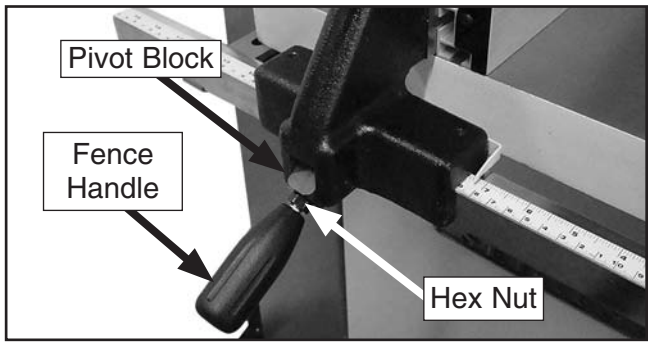


Figure 41. Fence handle components.

5. Install the resaw fence lock handle (with the washer and moving plate) onto the fence, then slide the resaw fence over the moving plate as shown in **Figure 42**.

   Note: *Leave the moving plate and lock handle loose enough to slide on the fence.*

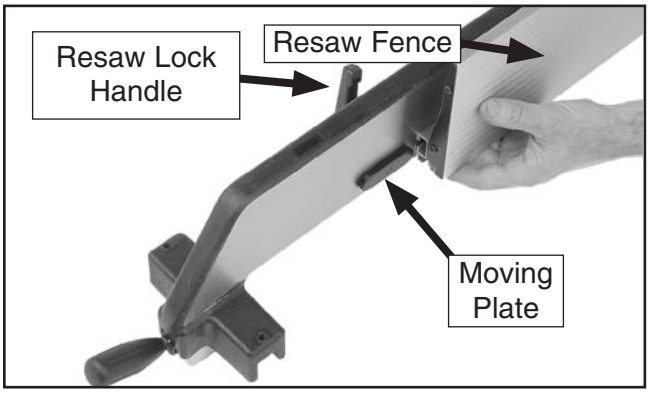


Figure 42. Attaching resaw fence to standard fence.

6. Tighten the resaw lock handle.

7. Pull the fence handle up and place the fence assembly on the rail.

8. Push the fence handle down to lock the fence assembly in place.

Installing Foot Brake (G0514X2, -X3)

Secure the foot pedal to the brake lever using the cap screws and lock washers, as shown in **Figure 43**.

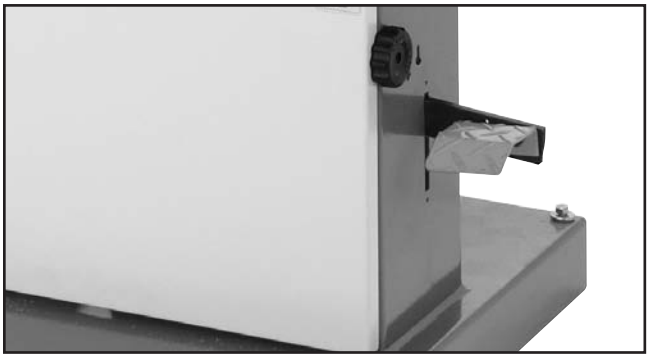


Figure 43. Foot brake installed.

G0514X, -X2, & X2B Power Connection

After you have completed all previous setup instructions and circuit requirements, the machine is ready to be connected to the power supply.

To avoid unexpected startups or property damage, use the following steps whenever connecting or disconnecting the machine.

Connecting Power

1. Turn the machine power switch **OFF**.

2. Insert the power cord plug into a matching power supply receptacle. The machine is now connected to the power source.

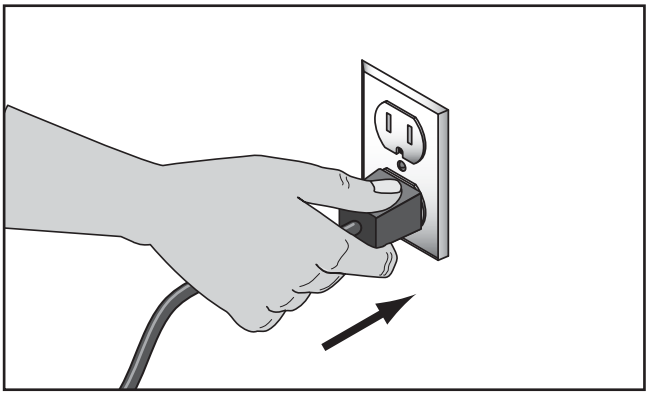


Figure 44. Connecting power.

Disconnecting Power

1. Turn the machine power switch **OFF**.

2. Grasp the molded plug and pull it completely out of the receptacle. Do not pull by the cord as this may damage the wires inside.

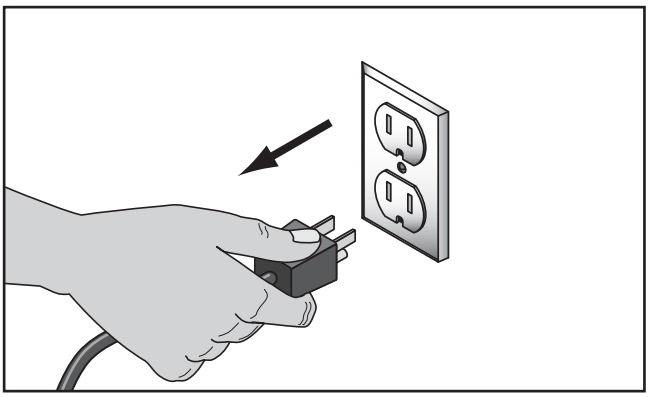


Figure 45. Disconnecting power.

G0514X3 Power Connection

Before the machine can be connected to the power source, an electrical circuit and connection device must be prepared per the **POWER SUPPLY** section in this manual; and all previous setup instructions in this manual must be complete to ensure that the machine has been assembled and installed properly. The disconnect switch installed by the electrician (as recommended) is the primary means for disconnecting or connecting the machine to the power source.

Connecting to Power Source

Move the disconnect switch handle to the ON position, as illustrated below. The machine is now connected to the power source.

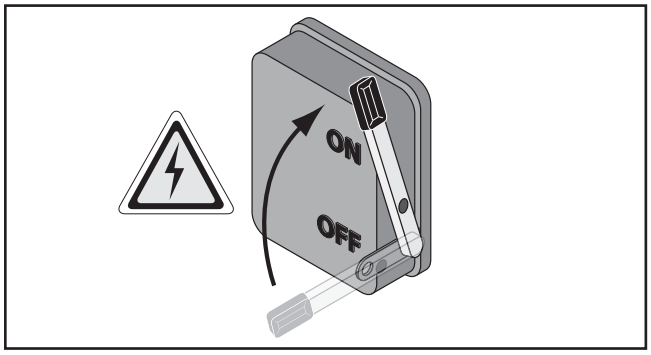


Figure 46. Connecting power to machine.

Disconnecting from Power Source

Move the disconnect switch handle to the OFF position, as illustrated below. The machine is now disconnected from the power source.

Note: *Lock the switch in the OFF position to restrict others from starting the machine.*

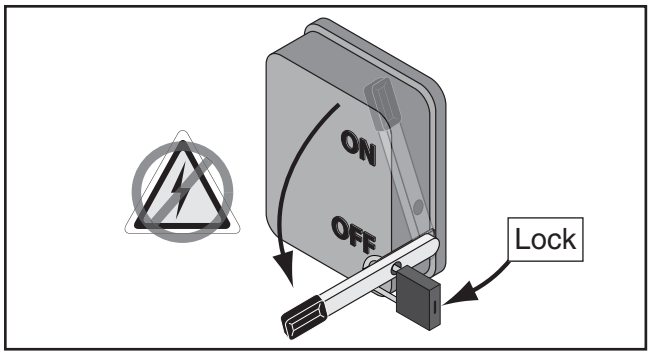


Figure 47. Disconnecting power from machine.

Test Run

Once the assembly is complete, test run your machine to make sure it runs properly and is ready for regular operation.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, 2) the safety disabling mechanism on the switch works correctly, and 3) the stop button safety feature works correctly.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then review **Troubleshooting** on **Page 55**.

If you still cannot remedy a problem, contact our Tech Support at (570) 546-9663 for assistance.

To test run the machine:

1. Make sure you have read the safety instructions at the beginning of the manual and that the machine is set up properly.

2. Make sure all tools and objects used during setup are cleared away from the machine.

3. Turn the machine ***ON*** to verify that it is operating correctly by turning the switch disabling key (**Figure 48**) to "1" .

   —When operating correctly, the machine runs smoothly with little or no vibration or rubbing noises.

   —Investigate and correct strange or unusual noises or vibrations before operating the machine further. Always disconnect the machine from power when investigating or correcting potential problems.

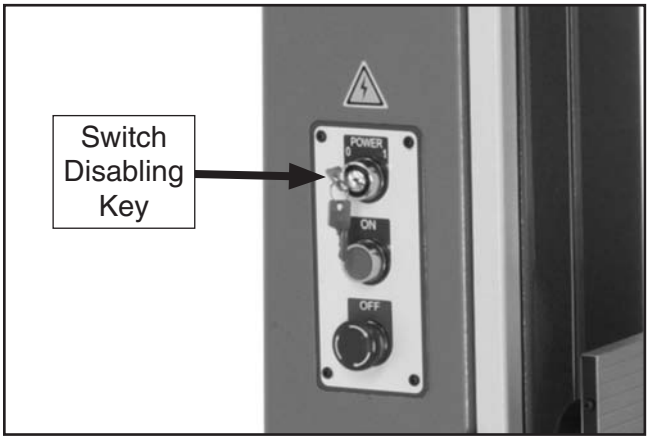


Figure 48. Switch disabling key and ON/OFF switch.

4. Press the OFF button to stop the machine.

5. WITHOUT resetting the OFF button, press the ON button. The machine should not start.

   —If the machine does not start, the OFF button safety feature is working correctly.

   —If the machine does start (with the stop button pushed in), immediately disconnect power to the machine. The OFF button safety feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

6. Push the OFF button in, then twist it clockwise so it pops out. When the OFF button pops out, the switch is reset and ready for operation (see **Figure 49**).

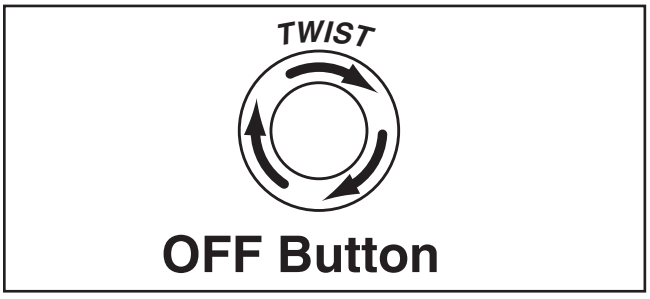


Figure 49. Resetting the switch.

7. Turn the bandsaw ***ON*** and allow it to reach full speed, then press the foot brake (**Figure 64** on **Page 38**) completely.

   —If the bandsaw blade stops, the foot brake is working correctly; continue to the next step.

   —If the bandsaw blade does not stop moving, the foot brake feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

8. Close the upper and lower wheel covers.

9. Turn the switch disabling key to "0", as shown in **Figure 48** on **Page 30**.

10. Try to turn the machine ***ON***.

    —If the bandsaw does not start, the switch disabling feature is working as designed. The Test Run is complete.

    —If the bandsaw starts, immediately disconnect power. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

11. **Model G0514X3 Only:** Verify that the power is not connected out of phase by starting/stopping the machine and determining if the motor turns in the correct direction, using the criteria below:

    —If the blade moves down and toward the table (as standing in front of the machine), it is turning in the correct direction.

    —If the blade turns up and away from the table, it is turning in the wrong direction. Stop the machine, disconnect the power source, then swap any two of the three power wires that connect to the machine.

Tensioning Blade

A properly tensioned blade is essential for making accurate cuts and is required before making many bandsaw adjustments. (Every time you replace the blade, you should perform this procedure because all blades tension differently.)

To tension the bandsaw blade:

1. Complete the **Test Run** procedure and make sure the blade is tracking properly.

2. Raise the upper blade guide assembly as high as it will go, and adjust the upper and lower guide blocks as far away from the blade as possible. **Note:** *This procedure will NOT work if the guide blocks have any contact with the blade.*

3. Engage the quick tension lever to the tightened position and turn the blade tension handwheel until the tension scale reads between 4 and 6.

4. Turn the bandsaw ***ON***.

5. Slowly release the tension one quarter of a turn at a time. When you see the bandsaw blade start to flutter, stop decreasing the tension.

6. Now, slowly increase the tension until the blade stops fluttering, then tighten the tension another quarter turn.

7. Look at what the tension gauge reads and use that as a guide for tensioning that blade in the future. **Note:** *Always detension the blade after use to increase blade life and reduce strain on the bandsaw components.*

8. Re-adjust the blade tracking as instructed on **Page 23**.

Adjusting Support Bearings

The support bearings are positioned behind the blade for support during cutting operations. Proper adjustment of the support bearings is an important part of making accurate cuts and also keeps the blade teeth from coming in contact with the guide bearings while cutting.

NOTICE

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and blade guide bearings must be properly adjusted before performing cutting operations.

Adjusting Upper Support Bearings

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure the blade is tracking properly and that it is correctly tensioned.

3. Familiarize yourself with the upper support bearing controls shown in **Figure 50**.

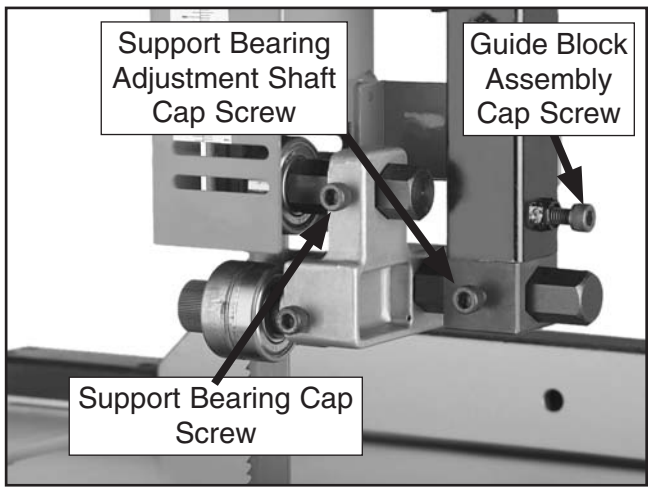


Figure 50. Upper support bearing controls.

4. Loosen the guide block assembly cap screw and rotate the blade guide assembly side-to-side, until the blade is perpendicular with the face of the support bearing, as illustrated in **Figure 51**.

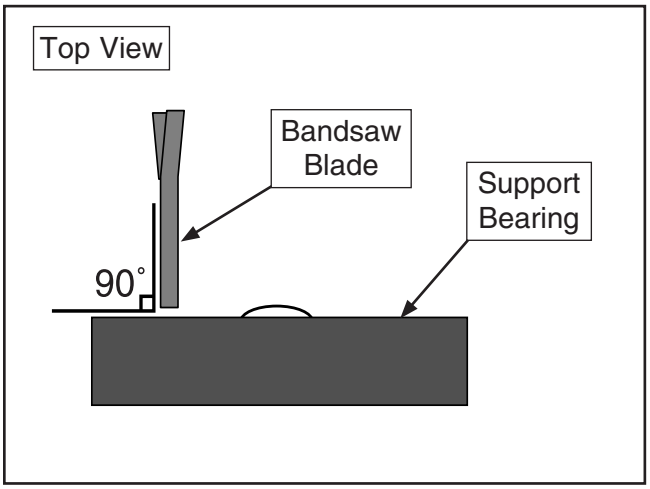


Figure 51. Blade should be perpendicular (90˚) to the face of the support bearing.

5. Tighten the assembly cap screw.

6. Loosen the cap screw on the support bearing adjustment shaft.

7. Place a 0.016" feeler gauge between the support bearing and the blade, and position the bearing 0.016" away from the back of the blade, as illustrated in **Figure 52**.

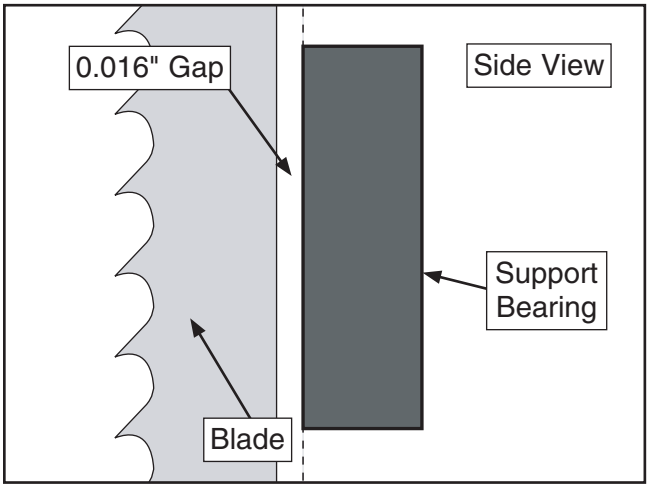


Figure 52. Blade should be aligned approximately 0.016" away from the bearing edge.

Note: *For a quick gauge, fold a dollar bill in half twice (four thicknesses of a dollar bill is approximately 0.016") and place it between the support bearing and the blade, as shown in* ***Figure 53***.

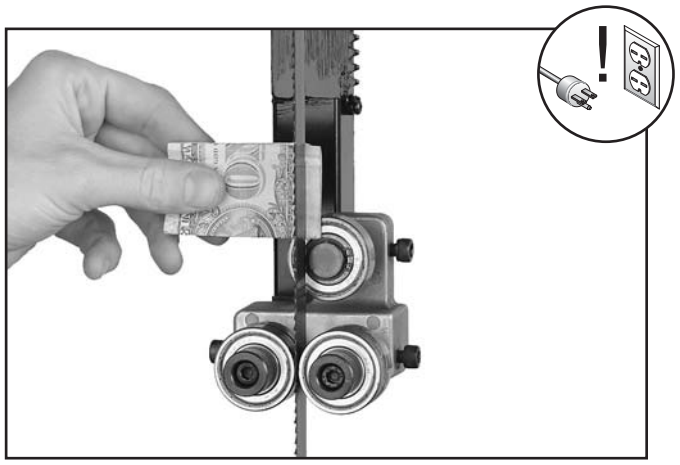


Figure 53. Dollar bill folded twice to make an approximate 0.016" gauge.

8. Tighten the cap screw to keep the support bearing locked in place.

Adjusting Lower Support Bearings

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure that the blade is tracking properly and is correctly tensioned.

3. Familiarize yourself with the lower support bearing controls shown in **Figure 54**.

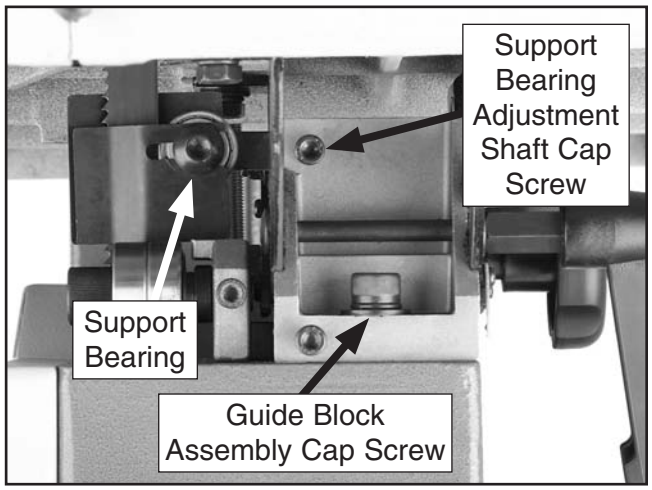


Figure 54. Lower support bearing controls.

4. Check to make sure the guide block assembly is perpendicular with the face of the support bearing as illustrated in **Figure 51**.

—If the guide block assembly is perpendicular to the face of the support bearing, continue on to the next step.

—If the guide block assembly is not perpendicular to the support bearing, loosen the guide block assembly cap screws and rotate the blade guide assembly side-to-side until the blade is perpendicular with the face of the support bearing, then re-tighten the cap screws. **Note:** *The table must be re-aligned with the blade after the lower guide block assembly is adjusted. Refer to* ***Page 35****.*

5. Loosen the cap screw on the support bearing adjustment shaft.

6. Place a 0.016" feeler gauge between the support bearing and the blade, and position the bearing 0.016" away from the back of the blade, as illustrated in **Figure 52**, or use a dollar bill, as shown in **Figure 53**.

7. Tighten the cap screw to keep the support bearing locked in place.

Adjusting Blade Guide Bearings

The blade guides provide side-to-side support to help keep the blade straight while cutting. The blade guides are designed to be adjusted in two ways—forward/backward and side-to-side.

To adjust the upper and lower blade guides:

1. Make sure the blade is tracking properly and that it is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Familiarize yourself with the blade guide controls shown in **Figure 55**.

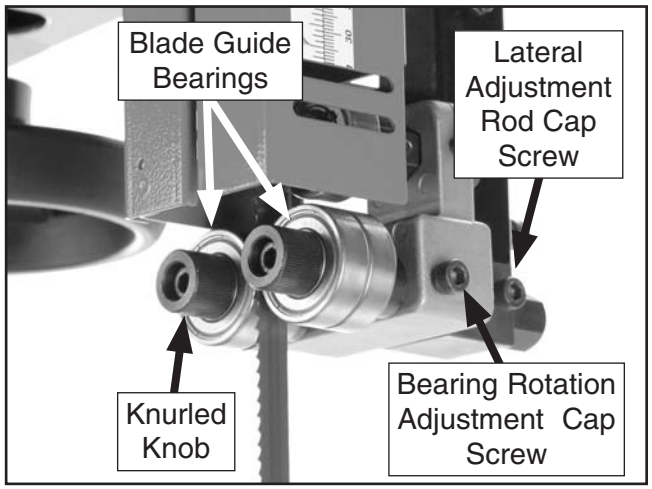


Figure 55. Blade guide controls.

4. Loosen the cap screw on the lateral adjustment rod and adjust the blade guides until the edges of the bearings are 1/16" behind the blade gullets, as illustrated in **Figure 56**.

   Note: *The 1/16" spacing is ideal, although with larger blades it may not be possible. In such cases, adjust the guide bearings as far forward as possible to the blade gullets, and still maintain the proper support bearing spacing adjustment.*

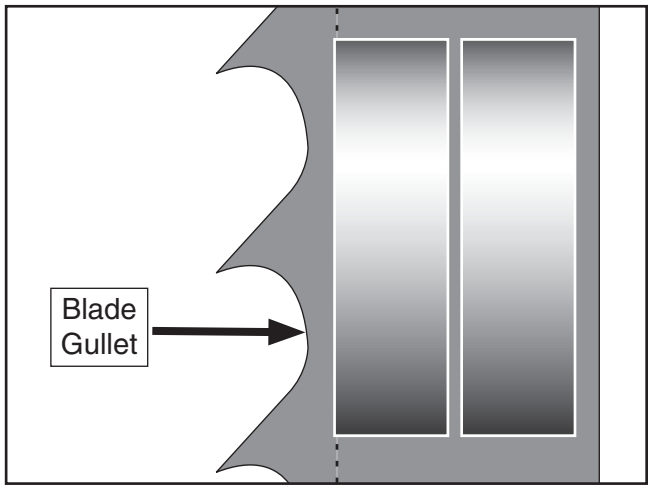


Figure 56. Lateral adjustment of blade guides.

NOTICE

Make sure that the blade teeth will not contact the guide bearings when the blade is against the rear support bearing during the cut or the blade teeth will be damaged.

5. Tighten the cap screw on the lateral adjustment rod.

6. Loosen the bearing rotation adjustment cap screws.

7. Rotate the knurled knob to position the bearings 0.004" away from the blade. **Note:** *0.004" is approximately the thickness of a dollar bill.*

8. Tighten the cap screw to lock the blade guide bearings in position.

9. Repeat this procedure for the lower guides.

NOTICE

Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and guide bearings must be properly adjusted before cutting operations.

Aligning Table

To ensure cutting accuracy when the table is first installed, the table should be aligned so that the miter slot is parallel to the bandsaw blade. This procedure works best with a ¾" blade installed.

To align the table so the miter slot is parallel to the bandsaw blade:

1. Make sure that the blade is tracking properly and that it is correctly tensioned.

2. DISCONNECT BANDSAW FROM POWER!

3. Loosen the trunnion bolts that secure the trunnions to the table.

4. Place an accurate straightedge along the blade. The straightedge should lightly touch both the front and back of the blade. **Note:** *Make sure the straightedge does not go across a tooth.*

5. Use a fine ruler to gauge the distance between the straightedge and the miter slot. The distance you measure should be the same at both the front and the back of the table (see **Figure 57**).

6. Adjust the table as needed for proper alignment.

7. Tighten the trunnion bolts.

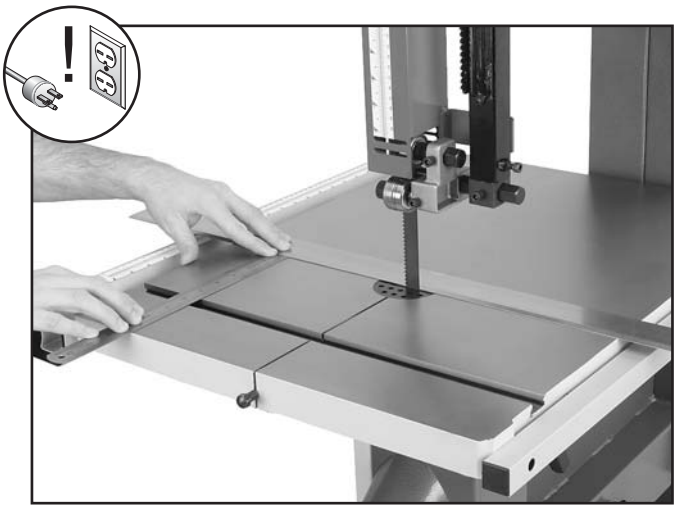


Figure 57. Measuring for miter slot to be parallel with blade.

Aligning Fence

To ensure cutting accuracy when the fence is first installed, the fence should be aligned with the miter slot.

To align the fence parallel with the miter slot:

1. DISCONNECT BANDSAW FROM POWER!

2. If the fence is mounted on the left-hand side of the blade, remove it and remount it next to the miter slot.

3. Loosen the four cap screws located on the top face of the fence (**Figure 58**).

Figure 58. Four fence cap screws.

4. Adjust the fence face parallel with the edge of the miter slot.

5. Tighten the four cap screws, being careful not to move the fence.

NOTICE

Adjusting the fence parallel to the miter slot does not guarantee straight cuts. The miter slot may need to be adjusted parallel to the side of the blade. Refer to the "Aligning Table" instructions on this page.

Fence Pointer Calibration

Your new bandsaw is equipped with a fence measurement system that includes a fence pointer, which must be calibrated when the bandsaw is first set up.

To calibrate the pointer:

1. DISCONNECT BANDSAW FROM POWER!

2. If the fence is mounted on the right-hand side of the blade, remove it and re-install it on the left-hand side of the blade.

3. Place the fence flush against the bandsaw blade (**Figure 59**).

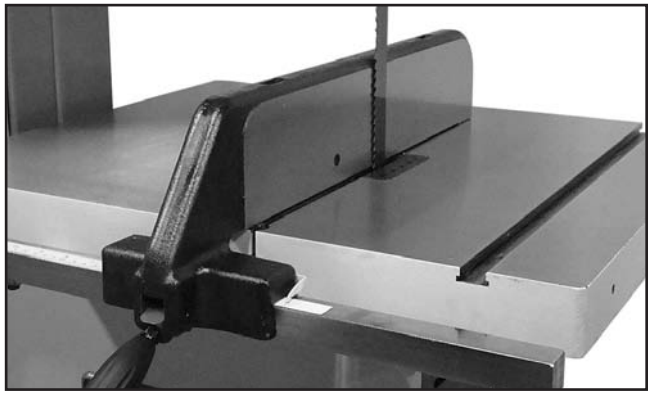


Figure 59. Fence flush with blade.

4. Loosen the pointer adjustment screw (**Figure 60**) and set the pointer in line with "0" on the measurement scale on the table.

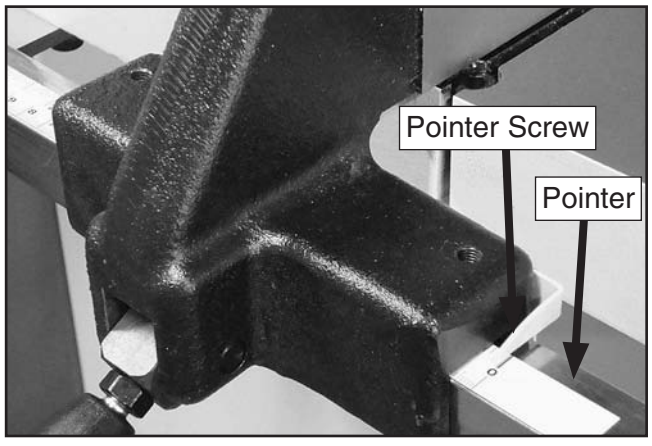


Figure 60. Calibrating fence pointer (adjustment screw out of view).

Miter Gauge

The miter gauge needs to be calibrated to the blade when it is first mounted in the miter slot.

To calibrate the miter gauge:

1. DISCONNECT BANDSAW FROM POWER!

2. Use a machinist's square with one edge against the face of the miter gauge and the other against the blade face as shown in **Figure 61**.

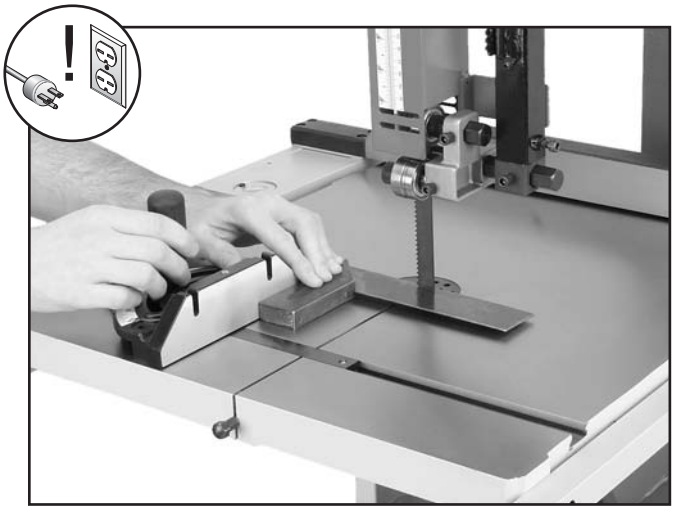


Figure 61. Squaring miter gauge to blade.

3. Loosen the lock knob on the miter gauge and adjust it flush with the edge of the square.

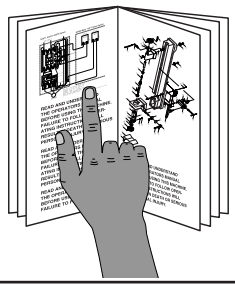
4. Tighten the lock knob, and verify the setting.

   Note: *Sometimes the tightening procedure can affect the adjustment.*

5. Loosen the screw that secures the angle pointer and adjust the pointer to the 0˚ mark on the scale.

6. Retighten the screw that secures the angle pointer.

SECTION 4: OPERATIONS

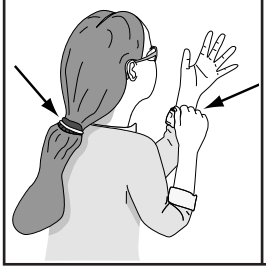


⚠WARNING

To reduce the risk of serious injury when using this machine, read and understand this entire manual before beginning any operations.

⚠WARNING

Damage to your eyes and lungs could result from using this machine without proper protective gear. Always wear safety glasses and a respirator when operating this machine.



⚠WARNING

Loose hair, clothing, or jewelry could get caught in machinery and cause serious personal injury. Keep these items away from moving parts at all times to reduce this risk.

NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, review industry trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Basic Controls

Refer to **Figures 62–66** and the following descriptions to become familiar with the basic controls and components of your bandsaw.

Power Switch: Disables the ON and OFF button when the key is turned to the "0" position. Enables ON and OFF button when key is turned to "1".

Switch Disabling Key: Disables the power switch and can be removed from the machine. Locking the switch in this manner can prevent unauthorized operation of the machine, which is especially important if the machine is not stored inside an access-restricted building

IMPORTANT: *Locking the power switch with the key only restricts its function. It is not a substitute for disconnecting power from the machine when adjusting or servicing.*

ON Button: Starts motor only if the OFF button is popped out and power switch key is turn to "1" position.

OFF Button: Disables the ON button. Enable the ON button by twisting the OFF button until it pops out.

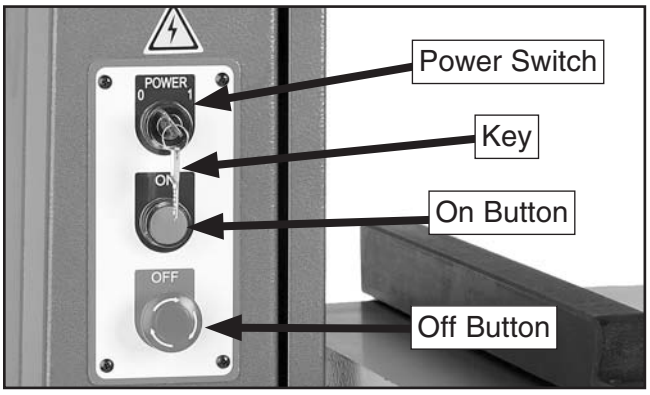


Figure 62. Control panel features.

Front Controls

A. Blade Tension Scale: Allows for easy monitoring of blade tension.

B. Blade Tension Handwheel: Tensions blade in gradual increments.

C. Blade Tracking Window: Allows for easy monitoring of blade tracking (refer to **Page 23**).

D. Fence and Miter Gauge: Allows for controlled straight or angle cutting.

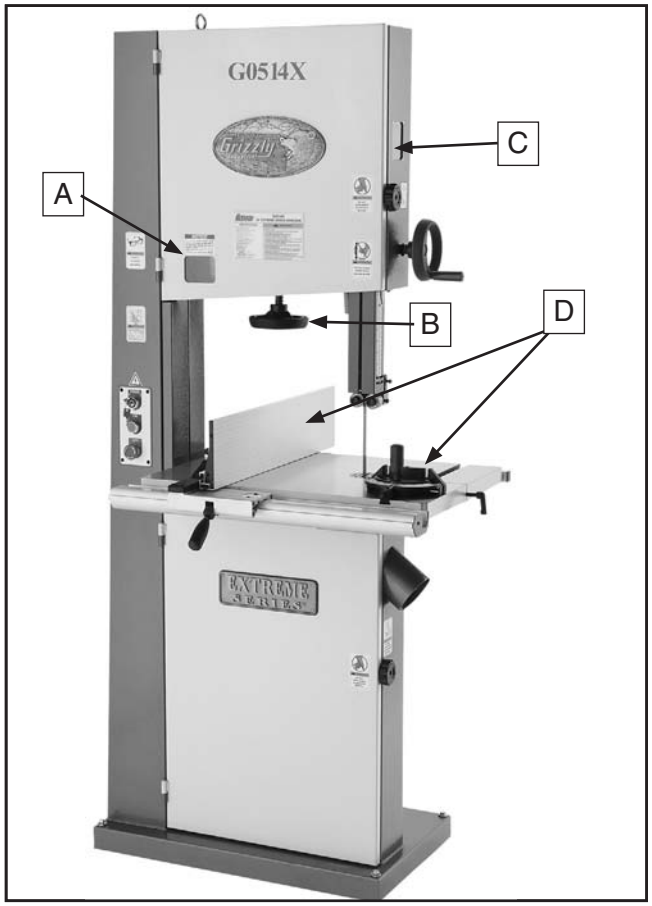


Figure 63. Front controls (G0514X).

E. Foot Brake (G0514X2 & G0514X3): Cuts power to motor and allows bandsaw blade to be quickly brought to a stop.

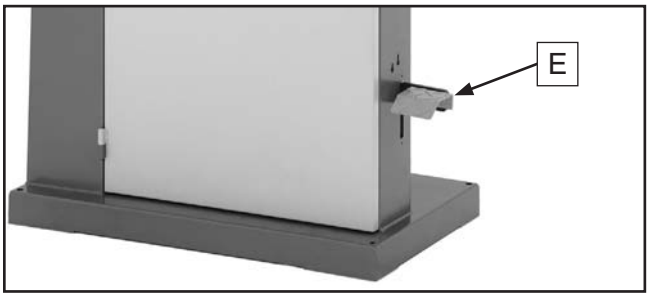


Figure 64. Foot brake.

Rear Controls

F. Guide Post Handwheel and Lock Knob: Moves blade guide support quickly to the desired height on the guide post; locks setting (refer to **Page 42**).

G. Quick Release Blade Tension Lever: Adjusts blade tension for quick blade changes.

H. Blade Tracking Knob and Lock Lever: Moves and locks blade tracking.

I. Table Tilt Lock Levers (G0514X): Locks or unlocks the table at the current angle.

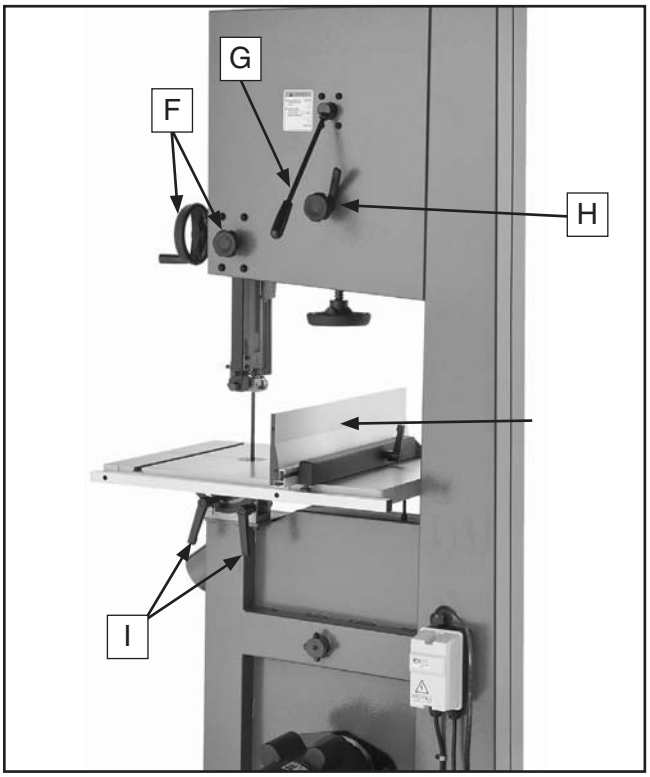


Figure 65. Rear controls (G0514X).

K. Table Tilt Lock Lever (G0514X2, G0514X2B, & G0514X3): Locks or unlocks the table at the current angle.

L. Table Tilt Handwheel (G0514X2, G0514X2B, & G0514X3): Tilts the table up to 5° to the left or 45° to the right (refer to **Page 42**).

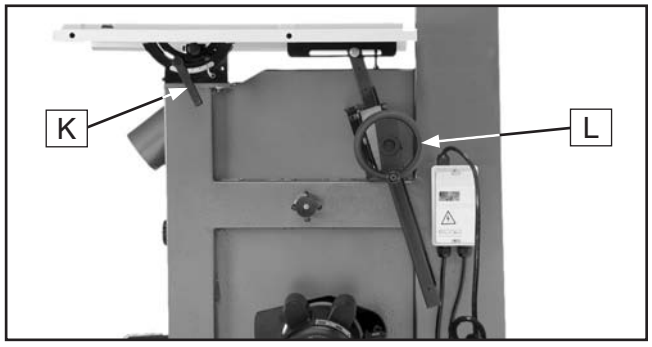


Figure 66. Table tilt controls (G0514X2, G0514X2B, and G0514X3)

G0514X2B Motor Brake

The Model G0514X2B has a motor brake that activates and quickly stops the blade when the OFF button is pressed.

Operation Overview

This overview covers the basic process that happens during a bandsaw operation. Familiarize yourself with this process to better understand the remaining parts of the **Operation** section.

To complete a typical operation, the operator does the following:

1. Examines the workpiece to make sure it is suitable for cutting.

2. Adjusts the fence away from the blade the same width of the desired cut and then locks it in place.

3. Adjusts the blade tilt, if necessary, to the correct angle of the desired cut.

4. Adjusts the blade guide height to approximately 1" from the top of the workpiece.

5. Checks to make sure the workpiece can safely pass all the way through the blade without interference from other objects.

6. Puts on safety glasses.

7. Starts the dust collector and bandsaw.

8. Holds the workpiece firmly and flatly against both the table and fence, and then pushes the workpiece into the blade at a steady and controlled rate until the workpiece moves completely beyond the blade.

The operator is very careful to keep fingers away from the blade and uses a push stick to feed narrow workpieces.

9. Stops the bandsaw.

Basic Cutting Tips

Here are some basic tips to follow when operating the bandsaw:

- Keep the upper blade guide assembly adjusted to within 1" of the workpiece.
- Replace, sharpen, and clean blades as necessary. Make adjustments periodically to keep the saw running in top condition.
- Use light and even pressure while cutting. Light contact with the blade makes it easier to follow lines and prevents extra friction, which reduces blade life.
- Avoid twisting the blade when cutting around tight corners. Allow the blade to saw around the corners.
- Do not back the workpiece away from the blade while the saw is running.

Workpiece Inspection

Some wood workpieces are not safe to cut or may require modification before they are safe to cut.

Before cutting wood, get in the habit of inspecting all workpieces for the following:

- ***Material Type:*** This machine is intended for cutting natural and man-made wood products, and laminate covered wood products. Cutting drywall or cementitious backer board creates extremely fine dust, which may reduce the life of the bearings. This machine is NOT designed to cut metal, glass, stone, tile, etc.

- **Foreign Objects (Figure 67):** Nails, staples, dirt, rocks and other foreign objects are often embedded in wood. While cutting, these objects can become dislodged and hit the operator or break the blade, which might then fly apart. Always visually inspect your workpiece for these items. If they can't be removed, do NOT cut the workpiece.

- ***Large/Loose Knots:*** Loose knots can become dislodged during the cutting operation. Large knots can cause blade damage. Choose workpieces that do not have large/loose knots or plan ahead to avoid cutting through them.

- ***Wet or "Green" Stock:*** Cutting wood with a moisture content over 20% causes unnecessary wear on the blade and yields poor results.

- ***Excessive Warping:*** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and can move unpredictably when being cut. DO NOT cut excessively warped wood.

- ***Minor Warping:*** Workpieces with slight cupping can be safely supported if the cupped side faces the table or fence, as shown in **Figure 68**. On the contrary, a workpiece supported on the bowed side will rock during a cut, leading to loss of control.

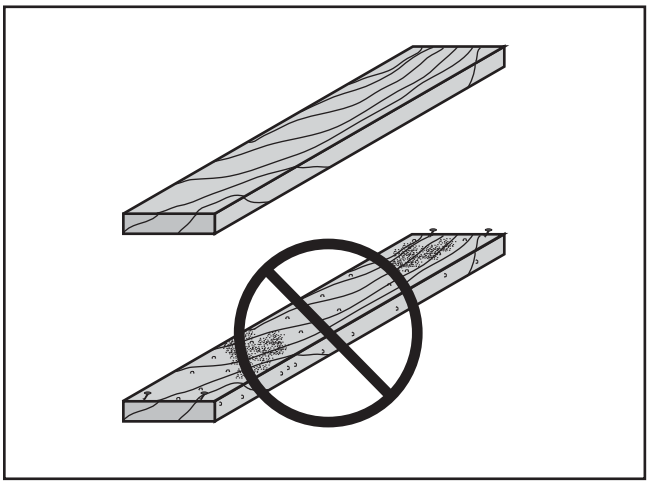


Figure 67. Choosing wood without foreign objects embedded.

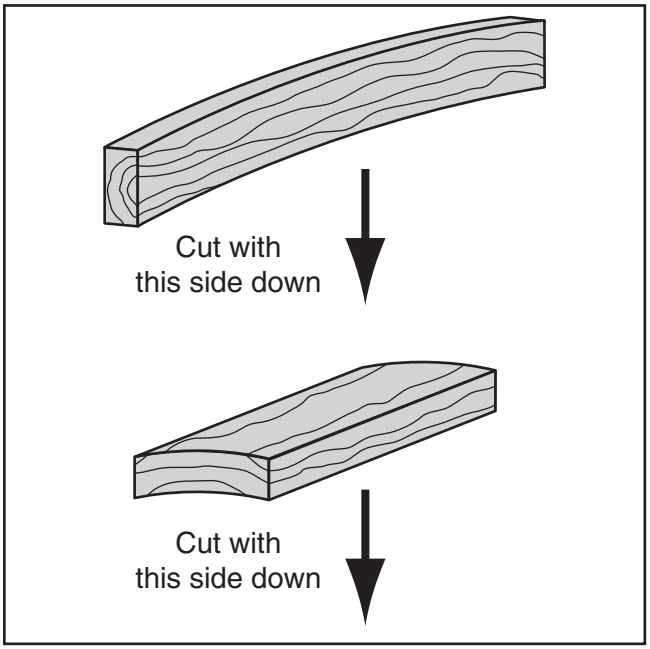


Figure 68. Cutting wood with minor warping.

⚠WARNING

Because of its unpredictable nature, use extreme caution if cutting warped stock. The difference between acceptable and unacceptable warped stock varies from machine to machine. If you are in doubt, square-up the stock first or do not cut it.

Foot Brake

The Models G0514X2 and G0514X3 are equipped with a foot brake (**Figure 69**). Use the brake to cut power to the motor and bring the blade to a halt.

Figure 69. Foot brake.

NOTICE

The foot brake will not stop the bandsaw wheels and blade instantly. DO NOT become over confident and relax your safety awareness because of the foot brake feature. Make sure the bandsaw blade has stopped moving completely before leaving the machine.

Table Tilt

The bandsaw table will tilt 5˚ left and 45˚ right to provide a wide range of cutting options. Remove the positive stop bolt to tilt the table to the left.

G0514X Table Tilt

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the lock handle on the table trunnion, shown in **Figure 70**.

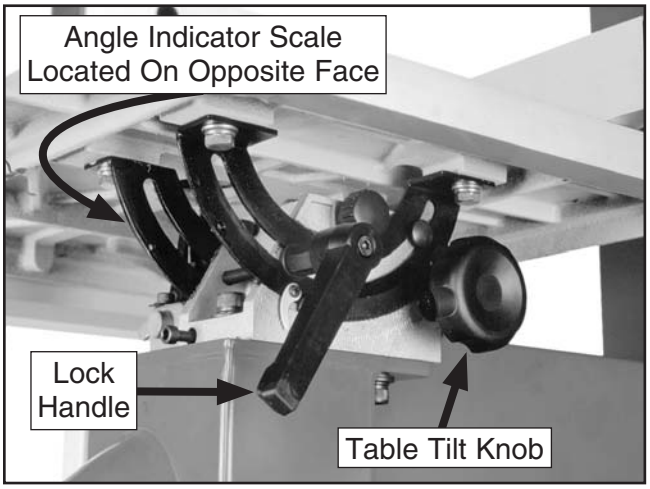


Figure 70. G0514X Table tilt controls.

3. Turn the table tilt knob to position the table to the desired angle of tilt. Refer to the angle gauge on the front table trunnion for the tilting angle.

4. To tilt the table to the left, turn the table tilt knob clockwise one turn, remove or lower the positive stop bolt, then turn the tilt knob counterclockwise.

5. Retighten the lock handle to secure the table.

6. Follow **Positive Stop** instructions on **Page 25** for resetting the stop bolt and table for horizontal (0º) operations.

G0514X2, G0514X2B, & G0514X3 Table Tilt

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the table tilt lock lever shown in **Figure 71**.

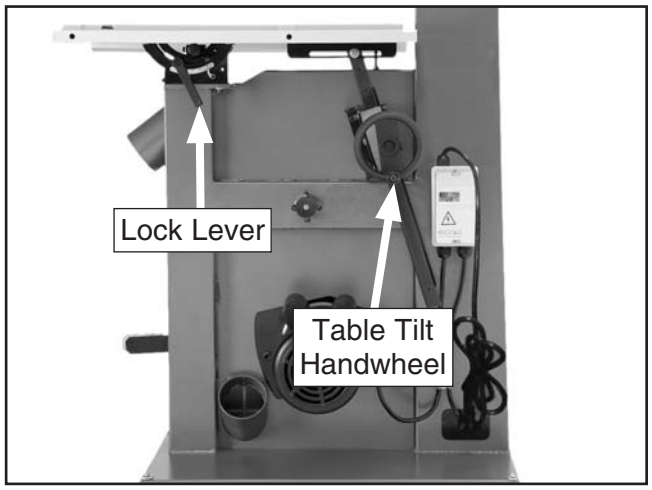


Figure 71. G0514X2, G0514X2B, and G0514X3 table tilt controls.

3. To tilt the table to the right, turn the table tilt handwheel clockwise (**Figure 71**).

4. To tilt the table to the left, turn the table tilt handwheel clockwise one turn, lower the positive stop bolt, then turn the handwheel counterclockwise.

5. Secure the table tilt lock lever (**Figure 71**).

6. Follow "Positive Stop" instructions on **Page 25** for resetting the stop bolt and table for horizontal (0º) operations.

Guide Post

The guide post, shown in **Figure 72**, connects the upper blade guide assembly to the bandsaw. The guidepost allows the blade guide assembly to move up or down to be as close to the workpiece as possible. In order to cut accurately and safely, the bottom of the blade guide assembly must be no more than 1" above the workpiece at all times—this positioning provides the greatest blade support and minimizes the amount of moving blade exposed to the operator.

To adjust the blade guide assembly on the guide post:

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure that the blade tension, blade tracking, support bearings, and blade guides are adjusted correctly.

3. Loosen the guide post lock knob shown in **Figure 72**.

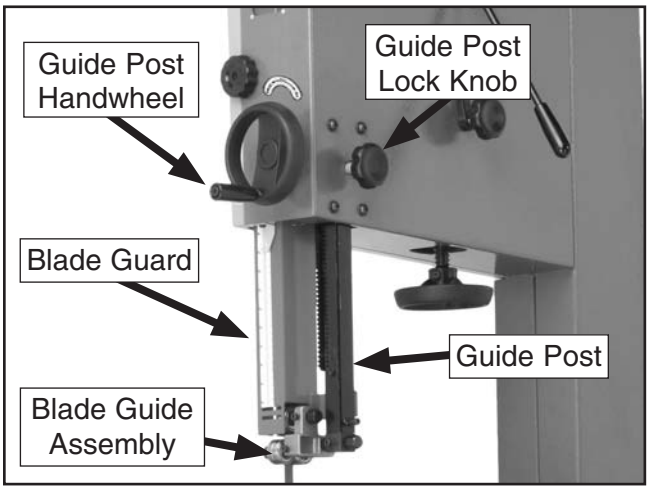


Figure 72. Guide post controls.

4. Turn the guide post handwheel to raise or lower the guide post until the upper blade guide assembly is within 1" from the top of the workpiece.

5. Lock the guide post in place with the lock knob.

Fine Tune Tracking

To fine tune the tracking:

1. Close the wheel covers and turn the bandsaw ***ON***.

2. Observe the blade tracking path through the clear window on the right edge of the bandsaw as shown in **Figure 73**.

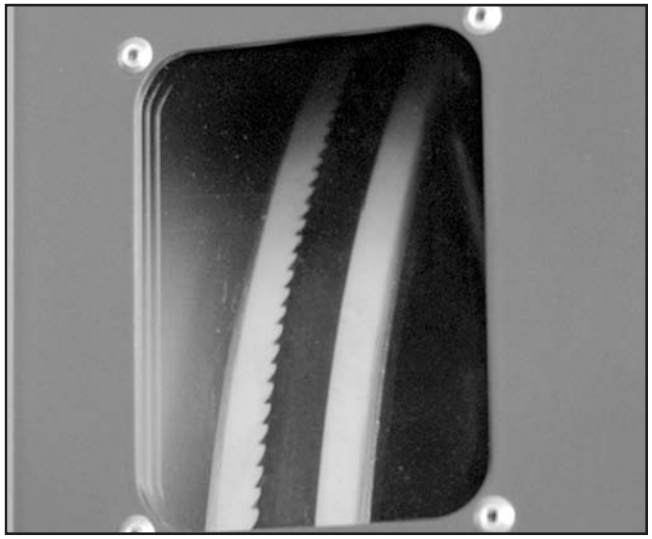


Figure 73. Blade tracking window.

3. Using the tracking controls (**Page 24**, **Figure 31**), adjust the blade so it tracks on the center of the wheel.

4. Tighten the tracking lock so the knob cannot move.

Ripping

Ripping is the process of cutting with the grain of the wood stock. For plywood and other processed wood, ripping simply means cutting down the length of the workpiece.

To make a rip cut:

1. Adjust the fence to match the width of the cut on your workpiece and lock the fence in place.

2. Adjust the blade guide assembly to the correct height.

3. After all safety precautions have been met, turn the bandsaw ***ON***. Slowly feed the workpiece into the blade and continue with the cut until the blade is completely through the workpiece. **Figure 74** shows a typical ripping operation. **Note:** *If you are cutting narrow pieces, use a push stick to protect your fingers.*

Figure 74. Ripping with a push stick.

⚠WARNING

NEVER place fingers or hands in the line of cut. In the event that something unexpected happens, your hands or fingers may be pulled into the blade. ALWAYS use a push stick when ripping narrow pieces. Failure to follow these warnings may result in serious personal injury!

Crosscutting

Crosscutting is the process of cutting across the grain of wood. For plywood and other processed wood, crosscutting simply means cutting across the width of the material.

To make a 90˚ crosscut:

1. Mark the workpiece on the edge where you want to begin the cut.

2. Adjust the blade guide assembly to the correct height and make sure the miter gauge is set to 90°.

3. Move the fence out of the way. Place the workpiece evenly against the miter gauge.

4. Hold the workpiece against the miter gauge and line up the mark with the blade.

5. After all safety precautions have been met, turn the bandsaw ***ON***. Slowly feed the workpiece into the blade and continue the cut until the blade is all the way through the workpiece. **Figure 75** shows a typical crosscutting operation.

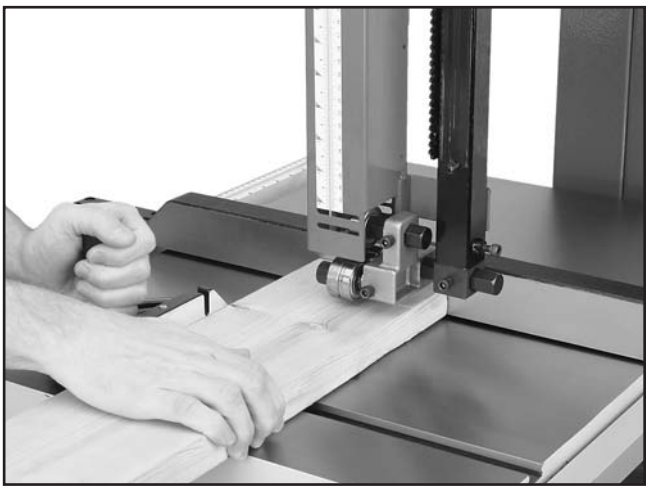


Figure 75. Crosscutting with miter gauge.

Resawing

Resawing (**Figure 76**) is the process of cutting a board into two or more thinner boards. The maximum board width that can be resawn is limited by the maximum cutting height of the bandsaw.

One of the most important considerations when resawing is blade selection. Generally, the wider blade, the better. In most applications, a hook or a skip tooth style will be desirable. Choose blades with fewer teeth-per-inch (from 3 to 6), because they offer larger gullet capacities for clearing sawdust, reducing heat buildup and reducing strain on the motor.

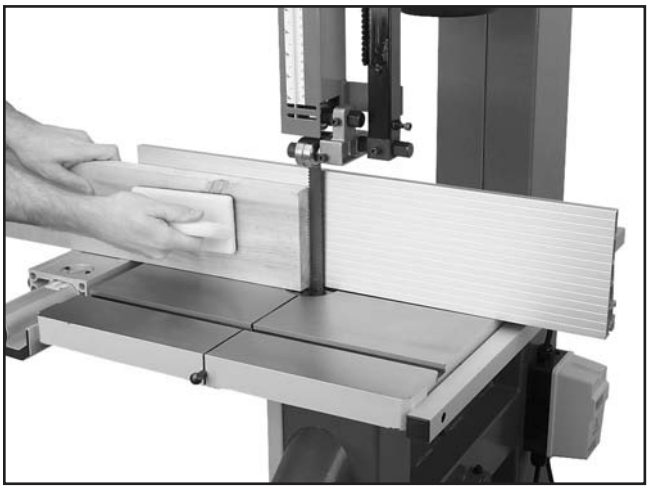


Figure 76. Resawing lumber.

⚠WARNING

When resawing thin pieces, a wandering blade (blade lead) can tear through the surface of the workpiece, exposing your hands to the blade teeth. Always use push blocks when resawing and keep your hands clear of the blade.

To resaw a workpiece:

1. Verify that the bandsaw is setup properly and that the table is perpendicular to the blade.

2. Use the widest blade your bandsaw will accept. **Note:** *The blade must also be sharp and clean.*

3. Install the resaw fence and set it to the desired width of cut and lock it in place.

> ***NOTICE***
> **The scale on the front rail will NOT be accurate when using the resaw fence.**

4. Support the ends of the board if necessary.

5. Turn the bandsaw ***ON***.

6. Using push paddles and a push stick, keep pressure against the fence and table, and slowly feed the workpiece into the moving blade until the blade is completely through the workpiece (see **Figure 76**).

Cutting Curves

When cutting curves, simultaneously feed and turn the stock carefully so that the blade follows the layout line without twisting. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, use either a narrower blade or a blade with more TPI (teeth per inch), or make more relief cuts.

Always make short cuts first, then proceed to the longer cuts. Relief cuts will also reduce the chance that the blade will be pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line. As you cut along the layout line, waste wood is released from the workpiece, alleviating any pressure on the back of the blade. Relief cuts also make backing the workpiece out easier, if needed.

> ***NOTICE***
> **The list below displays blade widths and the corresponding minimum radii for those blade widths.**

Width	Radius
1/8"	1/8"
3/16"	3/8"
1/4"	5/8"
3/8"	1 1/4"
1/2"	2 1/2"
5/8"	3 3/4"
3/4"	5 1/2"

Stacked Cuts

One of the benefits of a bandsaw is its ability to cut multiple copies of a particular shape by stacking a number of workpieces together. Before making stacked cuts, ensure that both the table and the blade are properly adjusted to 90°. Otherwise, any error will be compounded.

To complete a stacked cut:

1. Align your pieces from top to bottom to ensure that each piece has adequate scrap to provide a clean, unhampered cut.

2. Secure all the pieces together in a manner that will not interfere with the cutting. Hot glue on the edges works well, as do brad nails through the waste portion. (Be careful not to cut into the brads or you may break the blade!)

3. On the face of the top piece, lay out the shape you intend to cut.

4. Make relief cuts perpendicular to the outline of your intended shape in areas where changes in blade direction could strain the woodgrain or cause the blade kerf to bind.

5. Cut the stack of pieces as though you were cutting a single piece. Follow your layout line with the blade kerf on the waste side of your line as shown in **Figure 77**.

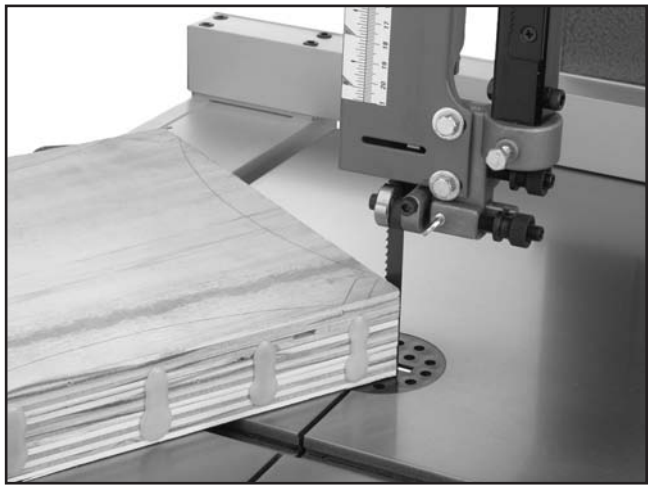


Figure 77. Typical stacked cut.

Blade Speed

The blade speed can be adjusted to 1700 or 3500 FPM. Speed adjustments are made by moving the V-belt position on the motor and wheel pulleys.

Most woodcutting can be performed successfully at the higher blade speeds. Slower blade speeds generally produce better results when cutting hardwoods, intricate curves, or when an exceptionally smooth cut is desired.

To adjust the blade speed:

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the motor mount cap screws shown in **Figure 78** and rotate the motor to loosen the V-belt.

Figure 78. Motor mount cap screws.

3. Refer to **Figure 79** to locate the correct V-belt position for the desired blade speed.

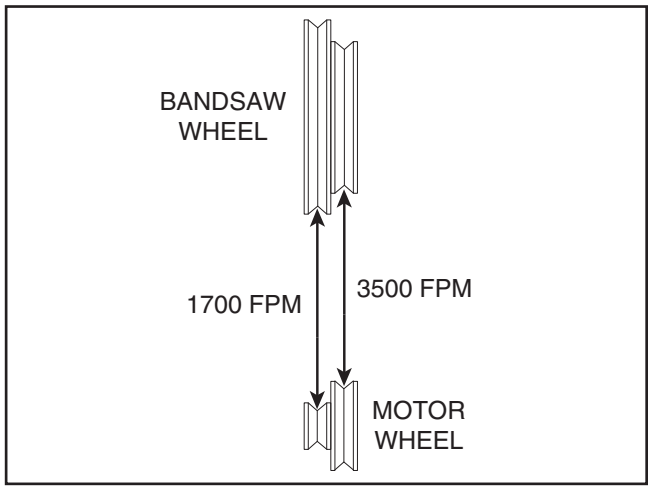


Figure 79. V-belt speeds.

4. Move the V-belt to the desired pulley.

5. Rotate the motor to tension the V-belt, then tighten the motor mount cap screws.

6. Check the V-belt tension. When tensioned correctly, the V-belt can be deflected approximately ¾" (see **Figure 80**).

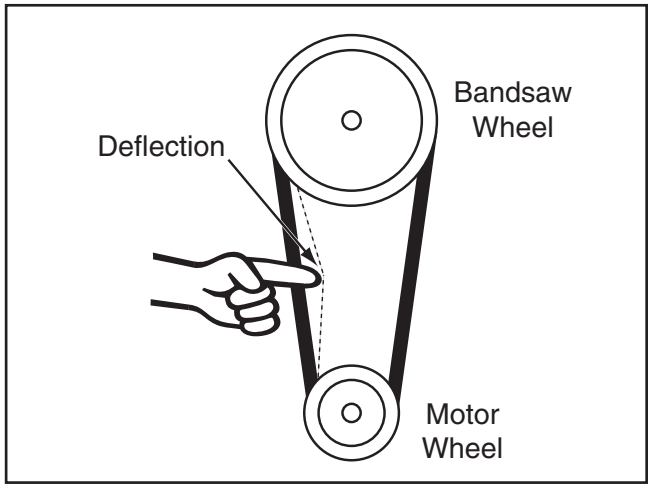


Figure 80. V-belt deflection.

Blade Information

Selecting the right blade requires a knowledge of the various blade characteristics to match the blade with the particular cutting operation.

Blade Length

Measured by the circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between wheels. This bandsaw is designed for blades that are 143" long. Refer to **Page 50** for blade replacements.

Blade Width

Measured from the back of the blade to the tip of the blade tooth (the widest point), blade width is often the first consideration given to blade selection. Blade width dictates the largest and smallest curve that can be cut, as well as how accurately it can cut a straight line.

The Model G0514X/G0514X3 can use blades from ⅛" to 1¼" in width. Always pick the size of blade that best suits your application.

- ***Curve Cutting:*** Use the chart in **Figure 81** to determine the correct blade for curve cutting. Determine the smallest radius curve that will be cut on your workpiece and use the corresponding blade width.

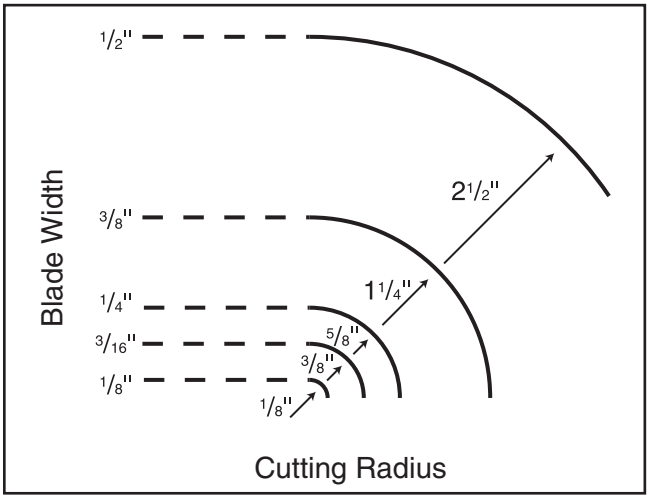


Figure 81. Blade width radii.

- ***Straight Cutting***: Use the largest width blade that you own. Narrow blades can cut tight curves (a small radius) but are not very good at cutting straight lines because they naturally wander (blade lead). However, larger blades are much better at cutting straight lines, but function poorly at cutting small curves because of their size.

Tooth Style

When selecting blades, another option to consider is the shape, gullet size, teeth set and teeth angle—otherwise known as “Tooth Style." **Figure 82** shows the three main categories of tooth style:

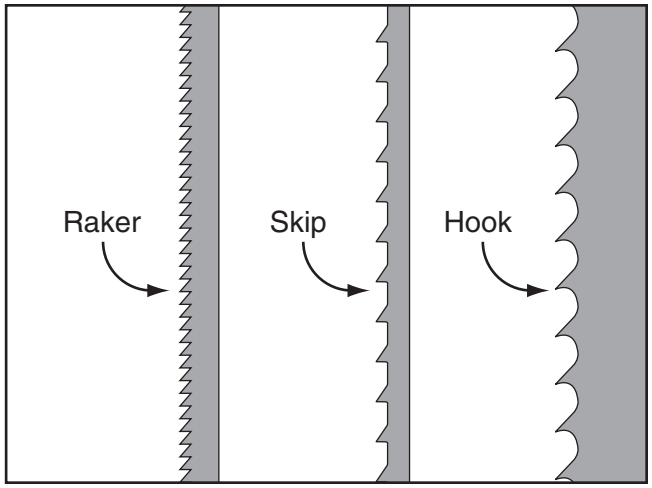


Figure 82. Raker, skip & hook tooth styles.

- ***Raker***: This style is considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on Raker blades usually are very numerous, have no angle, and produce cuts by scraping the material; these characteristics result in very smooth cuts, but do not cut fast and generate more heat while cutting.

- ***Skip***: This style is similar to a raker blade that is missing every other tooth. Because of the design, skip toothed blades have a much larger gullet than raker blades, and therefore, cut faster and generate more heat. However, these blades also leave a rougher cut than raker blades.

- ***Hook***: The teeth on this style have a positive angle (downward) which makes them dig into the material, and the gullets are usually rounded for easier waste removal. These blades are excellent for the tough demands of resawing and ripping thick material.

Tooth Pitch

Usually measured as TPI (teeth per inch), tooth pitch determines the size of the teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster. As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine pitched blades on harder woods and coarse pitched blades on softer woods.

Blade Care

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain longer use from a bandsaw blade if you give it fair treatment and always use the appropriate feed rate for your operation.

Be sure to select blades with the proper width, style, and pitch for each application. The wrong choice of blades will often produce unnecessary heat which will shorten the life of your blade.

A clean blade will perform much better than a dirty blade. Dirty or gummed up blades pass through the cutting material with much more resistance than clean blades. This extra resistance also causes unnecessary heat.

Blade Breakage

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable, in some cases, since it is the natural result of the peculiar stresses that bandsaw blades are subjected to. Blade breakage is also due to avoidable circumstances. Avoidable breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

The most common causes of blade breakage are:

- Faulty alignment and adjustment of the guides.
- Forcing or twisting a wide blade around a curve of short radius.
- Feeding the workpiece into the blade too fast.
- Tooth dullness or absence of sufficient set.
- Incorrect tension.
- Top blade guide assembly set too high above the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.

Blade Changes

⚠CAUTION

All saw blades are dangerous and may cause personal injury. To reduce the risk of being injured, wear leather gloves when handling saw blades.

Removing Blade

1. DISCONNECT BANDSAW FROM POWER!
2. Release the blade tension by turning the blade tension quick release lever to the left.
3. Remove the table insert and the table pin. Adjust the upper and lower guide bearings as far away as possible from the blade.
4. Open the upper and lower wheel covers, and with gloved hands, slide the blade off of both wheels.
5. Rotate the blade 90˚ and slide it through the slot in the table.

Installing Blade

1. DISCONNECT BANDSAW FROM POWER!
2. Slide the blade through the table slot, ensuring that the teeth are pointing down toward the table. **Note:** *If the teeth will not point downward in any orientation, the blade is inside-out. Put on heavy gloves, remove the blade, and twist it right side-out.*
3. Slip the blade through the guides, and mount it on the upper and lower wheels (**Figure 83**).

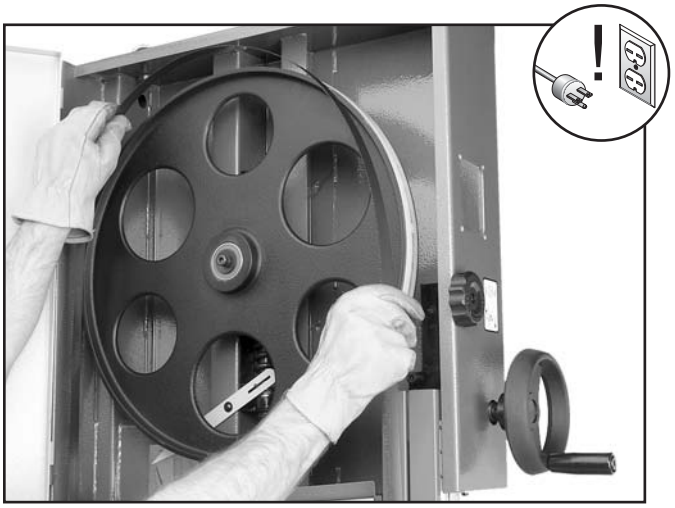


Figure 83. Placing blade on the wheels.

4. Tighten the blade tension lever.
5. Apply tension to the blade by turning the tension control knob. Rotate the upper wheel slowly by hand as tension is applied to allow the blade to center itself on the wheel. Adjust tracking if needed.
6. Adjust tension as described **Page 31**.
7. Adjust the upper/lower guide bearings and the support bearings.
8. Close the wheel covers.
9. Replace the table insert and table pin.

SECTION 5: ACCESSORIES

⚠WARNING

Some aftermarket accessories can be installed on this machine that could cause it to function improperly, increasing the risk of serious personal injury. To minimize this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to the newest copy of the Grizzly Catalog for other accessories available for this machine.

Call 1-800-523-4777 To Order

143" Carbon Steel Replacement Blades

MODEL	WIDTH	TPI
H4826	⅛"	14 RAKER
H4827	¼"	6 HOOK
H4828	¼"	18 RAKER
H4829	⅜"	10 RAKER
H4830	½"	6 HOOK
H4831	½"	10 RAKER
H4832	¾"	3 HOOK
H4833	1"	6 HOOK
H4834	1"	2 HOOK
H4835	1¼"	1.3 HOOK

G1163—1HP Dust Collector

Effective dust collection not only keeps your shop cleaner and more pleasant to work in, it can also keep you healthier. Our systems feature powerful motors and convenient collection bags - so they're ideal for just about any-sized woodworking operation.

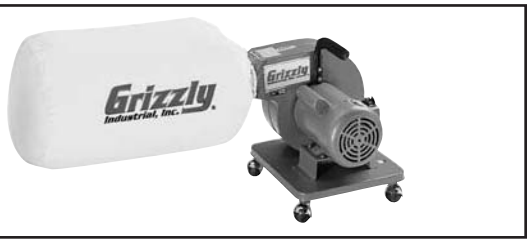


Figure 84. G1163 1HP dust collector.

G1094—Bandsaw Power Feeder with Fence, Single-Phase

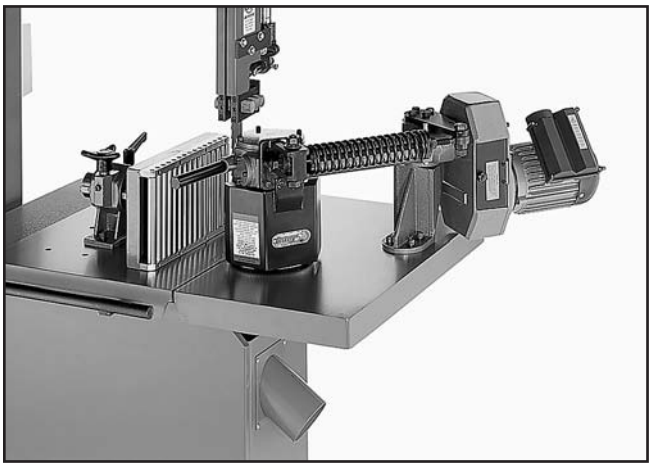


Figure 85. G1094 Bandsaw Power Feeder.

G7315Z—Super Heavy-Duty SHOP FOX® Mobile Base

This patented, super heavy-duty mobile machine base is the strongest mobile base on the market. 18" x 24½" minimum and adjusts to 28½" x 33½" maximum.1200 lb. capacity. This base is extremely stable with outrigger type supports and a four wheel system. Weighs 38 lbs.

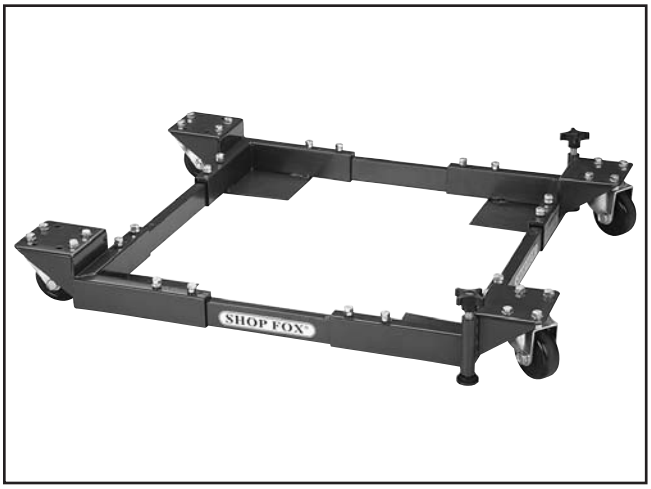


Figure 86. G7315Z SHOP FOX® Mobile Base.

SHOP FOX® Roller Stands

G8984—Single Roller Stand

Adjusts from 26⅝" to 45".

G8985—5 Roller Stand

Adjusts from 26" to 44⅝".

These super heavy-duty roller stands feature convenient hand knobs for fast height adjustment. Invaluable for support work on machines of various heights.

Figure 87. SHOP FOX® Roller Stands

G5562—SLIPIT® 1 Qt. Gel
G5563—SLIPIT® 12 oz Spray
G2871—Boeshield® T-9 12 oz Spray
G2870—Boeshield® T-9 4 oz Spray
H3788—G96® Gun Treatment 12 oz Spray
H3789—G96® Gun Treatment 4.5 oz Spray

Figure 88. Recommended products for protecting unpainted cast iron/steel on machinery.

T20388—Success with Bandsaws

Explore the many creative possibilities of floor-standing and portable bench-top bandsaws. With these practical instructions and color photographs, woodworkers can quickly master basic skills and then practice advanced procedures like making dovetail, mortise and tenon joints, cutting variable curve edges, and money-saving jigs and templates.

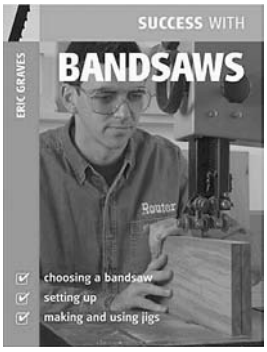


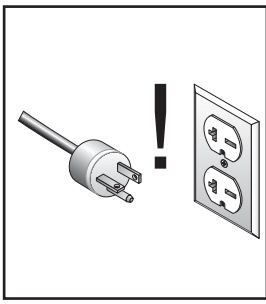
Figure 89. Success with Bandsaws book.

T10117—Big Mouth Dust Hood with Stand

Capture dust from any machine operation with this Big Mouth Dust Hood. Simply attach a 4" dust collection hose and adjust the hood right where you need it. The free standing base eliminates complicated machine set-ups and the tilting 16⅜" x 12⅞" hood adjusts from 23" to 43" high. Every shop needs one of these!

Figure 90. T10117 Big Mouth Dust Hood.

SECTION 6: MAINTENANCE



⚠WARNING

Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check:
- Loose mounting bolts.
- Damaged saw blade.
- Worn or damaged wires.
- Any other unsafe condition.

Monthly Check:
- V-belt tension, damage, or wear.
- Clean/vacuum dust buildup from inside cabinet and off motor.

Cleaning

Cleaning the bandsaw is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

Unpainted Cast Iron

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of products like G96® Gun Treatment, SLIPIT®, or Boeshield® T-9 (see **Section 5: Accessories** on **Page 50** for more details).

Brushes

The bandsaw is equipped with two lower brushes. The brushes should be checked daily and cleaned when they become dirty. There are adjustment brackets that allow the brushes to be adjusted for bristle wear. Refer to **Adjusting Wheel and Blade Brushes** on **Page 62** for adjustment details.

Lubrication

Since all bearings are sealed and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricated them.

This machine does need lubrication in other places. An essential part of lubrication is cleaning the components before lubricating them.

This step is critical because dust and chips build up on lubricated components, which makes them hard to move. Simply adding more grease to built-up grime will not result in smooth moving parts.

Clean the components in this section with an oil/grease solvent cleaner.

Blade Guide Rack and Pinion

Lubricant	Frequency	Qty
Multi-purpose GL2 Grease	As Needed	Thin Coat

To lubricate the blade guide rack and pinion:

1. DISCONNECT BANDSAW FROM POWER!
2. Lower the blade guide until it reaches the table.
3. Using a rag and mineral spirits, wipe off any existing grease and sawdust buildup on the rack (see **Figure 91**).

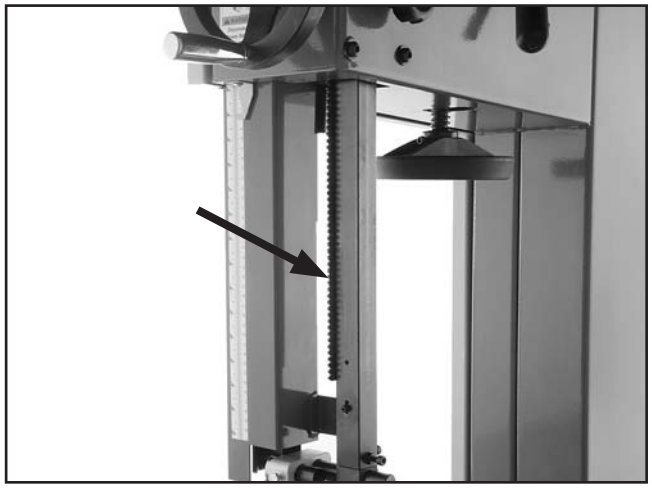


Figure 91. Example of rack lubrication location.

4. Apply a thin coat of multi-purpose GL2 grease to the rack.
5. Move the blade guide up and down several times and remove any excess grease to help prevent sawdust buildup.

Tension Adjustment Assembly

Lubricant	Frequency	Qty
Multi-purpose GL2 Grease	As Needed	Thin Coat

To lubricate the tension adjustment assembly:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the top wheel cover and look through the top of the wheel.
3. Using a rag and mineral spirits, wipe off any existing grease and sawdust buildup on the blade tension adjustment assembly and tension lever cam.
4. Apply a thin coat of multi-purpose GL2 grease to the tension adjustment assembly and tension lever cam (see **Figure 92**).

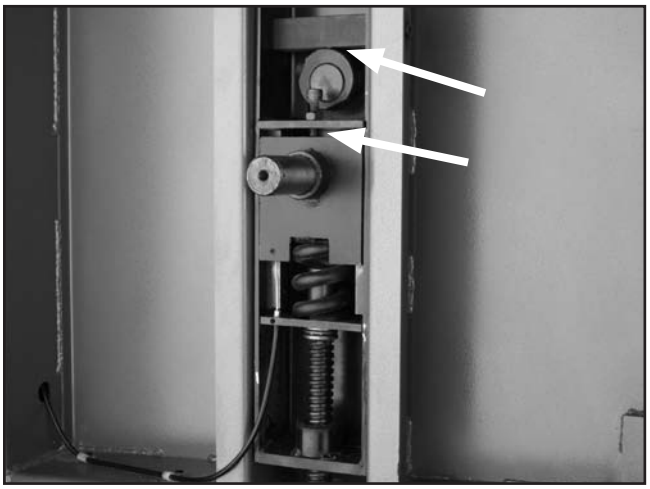


Figure 92. Example of tension adjustment assembly locations (top wheel removed for clarity).

Table Tilt Rack and Pinion Assembly (G0514X2, G0514X2B, & G0514X3)

Lubricant	Frequency	Qty
Multi-purpose GL2 Grease	As Needed	Thin Coat

To lubricate the table tilt rack and pinion assembly:

1. DISCONNECT BANDSAW FROM POWER!

2. With the table perpendicular to the blade, and using a rag and mineral spirits, wipe off all existing grease and sawdust buildup from the rack.

3. Move the table up to its maximum 45˚ angle and wipe (**Figure 93**) off all existing grease and sawdust buildup from the rack.

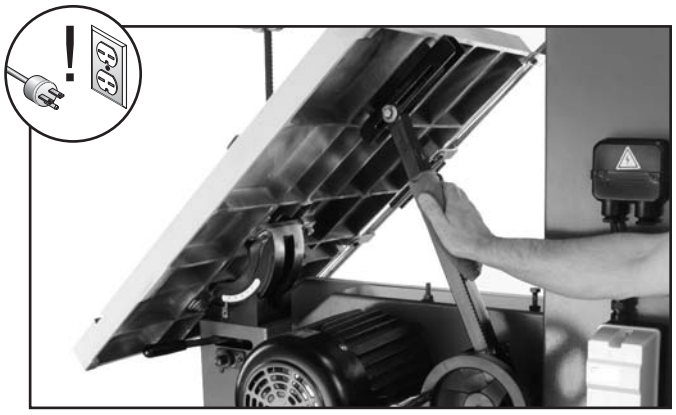


Figure 93. Example of lubricating table tilt rack and pinion assembly.

4. Apply a thin coat of multipurpose grease to the rack.

5. Move the table up and down several times to distribute the grease, then wipe off any excess grease.

Trunnion

Lubricant	Frequency	Qty
Multi-purpose GL2 Grease	As Needed	Thin Coat

To lubricate the trunnion, do these steps:

1. DISCONNECT BANDSAW FROM POWER!

2. Move the table up until it reaches its maximum 45˚ angle, and using a rag and mineral spirits, wipe off all excess grease and sawdust from the trunnion.

3. Apply a thin coat of light all purpose grease to the outside surfaces of the trunnion (**Figure 94 & 95**).

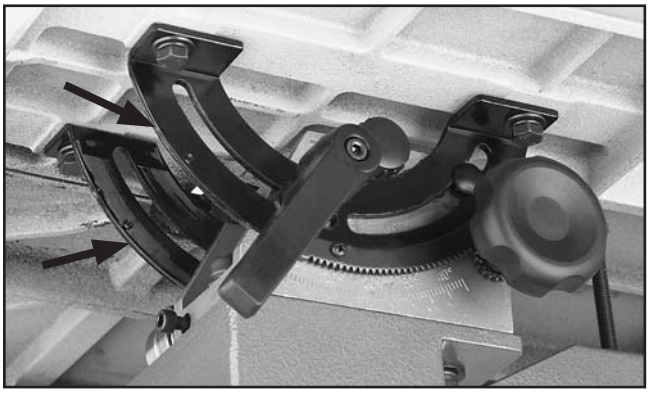


Figure 94. Trunnion lubrication location (G0514X).

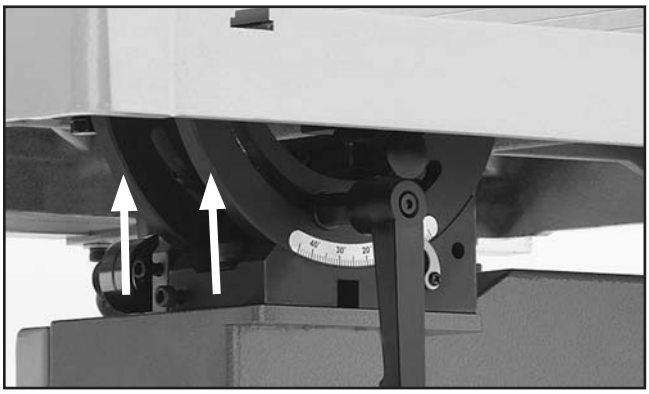


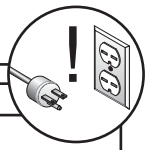
Figure 95. Trunnion lubrication location (G0514X2/G0514X2B/G0514X3).

4. Move the table down and then back up to distribute the grease, then wipe off any excess grease from the trunnion.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support at (570) 546-9663.
Note: *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Symptom	Possible Cause	Possible Solution
Machine does not start or a breaker trips.	1. Emergency stop button engaged/at fault. 2. Switch disabling key removed. 3. Door safety switch disengaged/at fault. 4. Thermal overload relay in mag switch tripped. 5. Break or short in wiring; or loose or corroded connections. 6. Plug or receptacle is corroded or miswired. 7. Power supply switched off/has incorrect voltage. 8. Motor connection wired incorrectly. 9. Contactor has poor contacts or is at fault. 10. Blown fuse/tripped circuit breaker. 11. Motor ON/OFF switch at fault. 12. Start capacitor has blown. 13. Centrifugal switch at fault. 14. Motor at fault.	1. Rotate button to reset/replace button. 2. Reinstall switch disabling key. 3. Close door or adjust/replace switch. 4. Allow relay/motor to cool. If necessary, press reset button inside switch. 5. Trace/replace broken or corroded wires; fix loose connections. 6. Correct the wiring. 7. Switch power supply on/verify voltage. 8. Wire motor correctly. Refer to inside junction box cover or **Page 69** (G0514X), **Page 70** (G0514X2), **Page 71** (G0514X2B), or **Page 72** (G0514X3). 9. Test all legs for power, test field coil, and fix contacts or replace if at fault. 10. Replace/reset fuse or circuit breaker. Repair possible short or circuit overload. 11. Replace switch. 12. Test/replace if at fault. 13. Adjust/replace centrifugal switch. 14. Test for shorted windings or bad bearings; repair or replace.
Main motor chatters during startup or during operation.	1. Phase converter (if used) wild wire connected to wrong terminal(G0514X3). 2. Power supply has incorrect voltage on one or more legs.	1. Connect wild wire to the machine power supply terminal that is not part of the switch coil circuit (G0514X3). 2. Contact electrician to check incoming voltage.
Machine operates in reverse.	1. Power connections wired out of phase (G0514X3).	1. Swap two power incoming power leads at the motor (G0514X3).

Symptom	Possible Cause	Possible Solution
Machine has excessive vibration or noise.	1. V-belt tension incorrect. 2. Bent, dull, or damaged blade. 3. Loose or damaged blade. 4. Blade weld contacting support bearing or blade guides. 5. Loose machine component. 6. Machine incorrectly mounted on floor. 7. Phase converter (if used) wild wire connected to wrong terminal(G0514X3). 8. Motor fan rubbing on fan cover. 9. V-belt worn or damaged. 10. Wheels not coplanar. 11. V-belt has a high spot. 12. Centrifugal switch out of adjustment; at fault. 13. Pulley loose or not in alignment; shaft bent. 14. Worn wheel bearing. 15. Wheel tires worn or incorrectly installed. 16. Wheels out of balance. 17. Motor bearings worn or damaged.	1. Tighten V-belt. See **Page 59.** 2. Replace blade (**Page 49**). 3. Tighten or replace blade. 4. Use file or stone to smooth and round the back of the blade. 5. Tighten loose component. 6. Level/shim base; tighten/adjust mounting hardware or feet. 7. Connect wild wire to the machine power supply terminal that is not part of the switch coil circuit (G0514X3) 8. Fix/replace fan cover; replace loose or damaged fan. 9. Replace V-belt. (Use link belts if possible.) See **Page 60**. 10. Adjust wheels coplanar (**Page 65**). 11. Replace/adjust the V-belt (**Page 60**). 12. Adjust/replace centrifugal switch. 13. Replace worn pulley, key, and shaft, and realign. 14. Check/replace wheel bearing. 15. Replace or re-install tires. 16. Replace wheels. 17. Replace motor bearings or replace motor.
Machine stalls or slows when operating.	1. Too much pressure when feeding workpiece. 2. Workpiece too moist or material not suitable for machine. 3. Workpiece is warped. 4. Fence incorrectly adjusted. 5. Belt(s) slipping. 6. Run capacitor at fault. 7. Motor connection wired incorrectly. 8. Motor is wired out of phase (G0514X3). 9. Motor overheated. 10. Contactor has poor contacts or is at fault. 11. Centrifugal switch at fault. 12. Motor at fault.	1. Reduce pressure when feeding workpiece. 2. Only cut wood and ensure moisture is below 20%. 3. Straighten workpiece or use a different one. 4. Adjust/calibrate fence. 5. Tension/replace belt(s); ensure pulleys are aligned. 6. Test/repair/replace. 7. Review wiring diagram on motor cover; correct wire connections. 8. Swap any two incoming power leads. 9. Let cool, clean motor, and reduce workload. 10. Test all legs for power, test field coil, and fix contacts or replace if at fault. 11. Adjust/replace centrifugal switch if available. 12. Test for shorted windings, bad bearings and repair or replace.
Miter bar binds in miter slot.	1. Miter slot dirty or gummed up.	1. Carefully clean miter slot.
Table does not tilt to 90 degrees.	1. Pointer or scale calibrated incorrectly. 2. Positive stop bolt not set correctly.	1. Calibrate pointer/scale at true 90 degrees (**Page 25**). 2. Adjust positive stop bolt.
Table does not tilt to 45 degrees.	1. Pointer or scale calibrated incorrectly. 2. Machine component blocking path.	1. Calibrate pointer/scale at true 45 degrees. 2. Remove component blocking table.

Symptom	Possible Cause	Possible Solution
Table hard to tilt.	1. Sawdust or pitch trapped between trunnion and base. 2. Metal burrs on trunnion.	1. Calibrate pointer/scale at true 45 degrees. 2. Remove burrs.
The cuts are rough, or show scoring.	1. Blade is overloaded and twists. 2. The blade TPI is too coarse. 3. The blade is loose and slipping on wheels. 4. Blade tracking is incorrect. 5. The blade has missing or bent teeth. 6. The blade has a faulty weld.	1. Decrease the feed rate. 2. Use the correct blade for material and speed of cut. 3. Adjust bade tension as required. 4. Adjust the blade tracking back to normal. 5. Replace the blade (**Page 49**). 6. Replace the blade (**Page 49**).
Blade or teeth break.	1. Blade tension is incorrect. 2. Incorrect blade for application. 3. The feed is too heavy or blade speed is wrong. 4. Cutting corners too sharply. 5. Blade used when dull. 6. Blade tracking is wrong. 7. Blade guide adjustment at fault. 8. Inadequate blade support. 9. Blade weld at fault. 10. Wheel tires worn or incorrectly installed. 11. Fence or miter slot out of alignment with blade.	1. Adjust blade tension (**Page 31**). 2. Use correct blade for application. 3. Reduce feed rate or increase blade speed (**Page 39**). 4. Use a wider arc on outside cuts, or use relief cuts to make tight inside cuts. 5. Replace the blade (**Page 49**). 6. Adjust the blade tracking back to normal (**Page 23**). 7. Adjust blade guide bearings for correct blade support. 8. Adjust upper blade guide so it is as close as possible to workpiece. 9. Replace with blade from different manufacturer (**Page 49**). 10. Replace or re-install tires. 11. Align table miter slot and fence with blade (**Page 35**).
Blade wears on one side, slows, smokes or shows overheating.	1. Blade contacting table insert. 2. The blade guides are worn or mis-adjusted. 3. The blade has insufficient support. 4. Blade is installed backwards. 5. Blade spinning backwards due to out of phase wiring (3-phase only, G0514X3). 6. Too much side pressure when feeding workpiece. 7. The wheels are out of alignment. 8. Dull or incorrect blade. 9. Blade is bell-mouthed. 10. Fence not parallel with blade (pressure at blade backside). 11. Table top surface is not parallel or square to blade.	1. Adjust blade guide bearings to eliminate excess side pressure. Adjust table for correct blade clearance and miter slot alignment. 2. Tighten the blade guide bracket. 3. Tighten the blade guide as close to the workpiece as possible. 4. Check blade rotation as described in Test Run" and reverse blade if necessary. 5. Switch two of the current carrying wires at the terminal strip. 6. Feed workpiece straight into the blade. 7. Adjust the wheels so they are coplanar (**Page 65**). 8. Replace blade (**Page 49**). 9. Install new blade. 10. Adjust fence parallel with blade (**Page 35**). 11. Adjust/shim table/trunnion position until blade and table are parallel and square.
Sawdust buildup inside cabinet.	1. Clogged dust port. 2. Low CFM (airflow) from dust collection system.	1. Clean out dust port. 2. Repair ducting for leaks or clogs, move dust collector closer to machine, install a stronger dust collector.

Symptom	Possible Cause	Possible Solution
Blade tracks incorrectly, or comes off wheels.	1. Tracking is not adjusted properly. 2. Wheels are not coplanar. 3. Blade tension is too loose. 4. Blade guides need adjustment. 5. Feeding workpiece too fast. 6. Incorrect blade for bandsaw. 7. Blade is bell-mouthed, worn or dull. 8. Rubber tire on wheel is damaged or worn.	1. Adjust tracking (**Page 23**). 2. Adjust wheel coplanarity (**Page 65**). 3. Increase blade tension (**Page 31**). 4. Adjust blade guides (**Page 33**). 5. Feed workpiece slower (**Page 39**). 6. Install correct blade for machine. 7. Install new blade, and de-tension blade when not in use. 8. Replace rubber tires.
The cut is crooked, or the blade wanders (blade lead).	1. The feed pressure is too high or the blade speed is wrong. 2. The blade tension is low. 3. The blade is dull or damaged. 4. Inadequate blade support. 5. Incorrect blade for application. 6. The blade tracking is wrong. 7. Table is loose. 8. Fence or miter slot out of alignment with blade. 9. Blade guide alignment at fault.	1. Adjust feed rate and cutting speed as required. 2. Increase the blade tension (**Page 31**). 3. Replace the blade (**Page 49**). 4. Adjust upper blade guide so it is as close as possible to workpiece (**Page 33**). 5. Use wider blade. 6. Adjust the blade tracking back to normal. 7. Tighten table trunnion mounting bolts or tilt lock lever. 8. Align table miter slot and fence with blade. 9. Adjust blade guide bearings for correct blade support.

Checking V-Belt

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition and operate under proper tension. The belt should be checked for cracks, fraying, and wear. Belt tension should be checked at least every 3 months—more often if the bandsaw is used daily.

To check the V-belt:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the lower wheel cover.
3. Note the condition of the V-belt. If the V-belt is cracked, frayed, or glazed, replace it.
4. Push the center of the V-belt. Note the amount of deflection (**Figure 96**). If deflection is more than ¾", re-tension the V-belt.

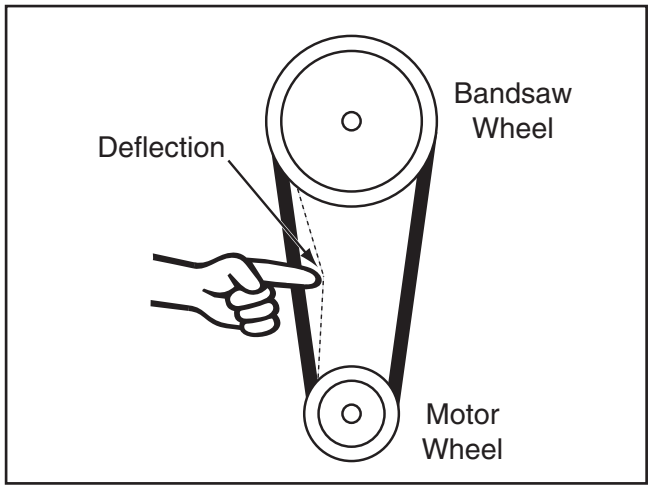


Figure 96. V-belt deflection.

Tensioning V-Belt

Tools Needed: **Qty**
Hex Wrench 6mm.....1

To tension the V-belt:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the lower wheel cover.
3. Loosen the motor mount screws shown in **Figure 97**.

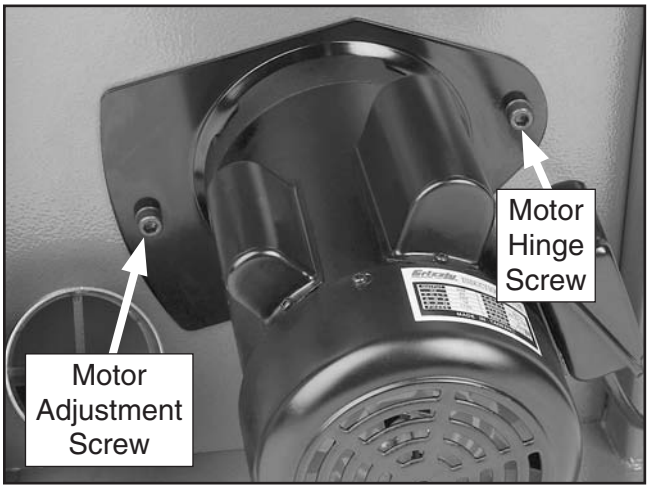


Figure 97. Motor mount screws.

4. Rotate the motor down to tension the V-belt, then tighten the motor adjustment screw.
5. Push the center of the V-belt. If deflection is approximately ¾" with moderate pressure from your thumb or finger, then the tension is correct. If the deflection is more than ¾", repeat **Steps 3 & 4**.
6. When the V-belt tension is correct, tighten the motor hinge screw and close the lower wheel cover.

Replacing V-Belt

Tools Needed:	Qty
Hex Wrench 6mm	1
Hex Wrench 8mm	1

To replace the V-belt:

1. DISCONNECT BANDSAW FROM POWER!
2. Open both wheel covers, and remove the blade.
3. Loosen the motor mount screws shown in **Figure 97**.
4. Rotate the motor up to loosen the V-belt, then tighten the motor adjustment screw.
5. Pull the V-belt off of the motor pulley.
6. Unthread the wheel mount bolt shown in **Figure 98** and slide the lower wheel off of the bearing shaft.

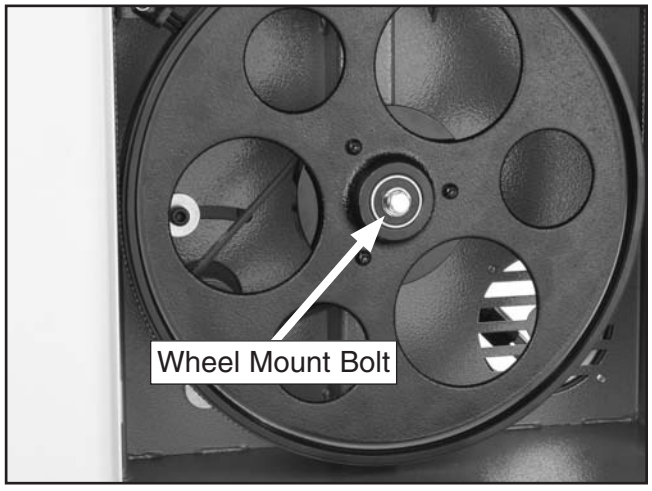


Figure 98. Example of wheel mount bolt.

7. Slip the old V-belt off of the wheel pulley and install the new V-belt in its place.
8. Install the lower wheel back onto the bearing shaft and replace/tighten the wheel mount bolt.
9. Slip the new V-belt onto the motor pulley.
10. Rotate the motor down to tension the V-belt, then tighten the motor adjustment screw.
11. Check the V-belt tension and adjust if necessary as described in the **Tensioning V-Belt** instructions on **Page 59**.
12. When the V-belt tension is correct, tighten the motor hinge bolt and close the lower wheel cover.

Blade Lead

Bandsaw blades commonly wander off the cut line when sawing, as shown in **Figure 99**. This is called blade lead. Blade lead is commonly caused by too fast of a feed rate, a dull or abused blade, or improper tension. If your blade is sharp/undamaged and you still have blade lead, perform the following instructions.

Tools Needed: **Qty**
Scrap Wood Cut to ¾" x 3" x 17" 1

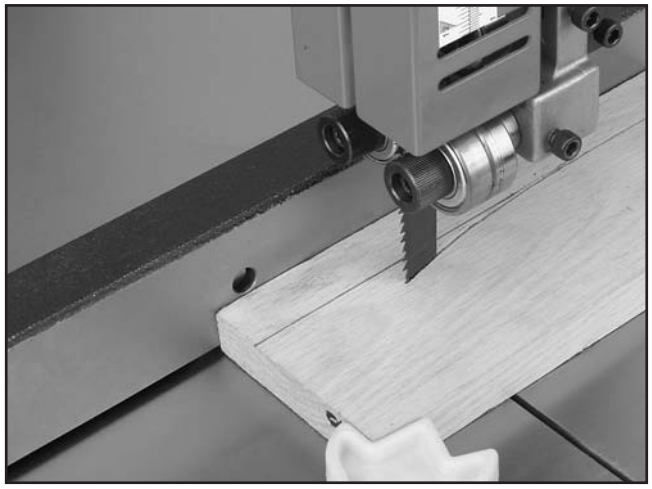


Figure 99. Blade leading away from line of cut.

To correct blade lead:

1. Use less pressure when feeding the workpiece through the cut.

2. Check that the miter slot or fence is parallel to the blade line, and correct if necessary.

3. Check for proper blade tension. If the blade tension is correct and it is not convenient to replace the blade, compensate for lead by skewing the fence or adjusting the table.

To skew your fence:

1. Cut a piece of scrap wood approximately ¾" thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.

2. Cut halfway through the board on the line by pushing it into the blade. Turn the bandsaw ***OFF*** and wait for the blade to stop.

3. Clamp the board to the bandsaw table without moving it. Now slide the fence over to the board so it barely touches one end of the board.

4. Loosen the four cap screws on top of the fence.

5. Skew the fence so it is parallel to the edge of the scrap piece. You may need to re-adjust the fence locking mechanisms to gain maximum adjustment.

6. While maintaining the skew, tighten the cap screws.

To shift the table:

1. On a scrap piece of wood, mark a line that is perpendicular to the front edge.

2. Cut halfway through the board on the line by pushing it into the blade.

3. Turn the bandsaw ***OFF*** and wait for the blade to stop.

4. Loosen the table mounting bolts. Shift the table to compensate for the blade lead, then retighten the table bolts.

5. Repeat **Steps 1–4** until the blade cuts straight.

Adjusting Wheel Brush

The lower wheel compartment contains two wheel brushes, one of which is shown in **Figure 100**. These brushes are designed to sweep sawdust off the wheel tire as the bandsaw is operating. In order to work properly each brush must make contact with the wheel.

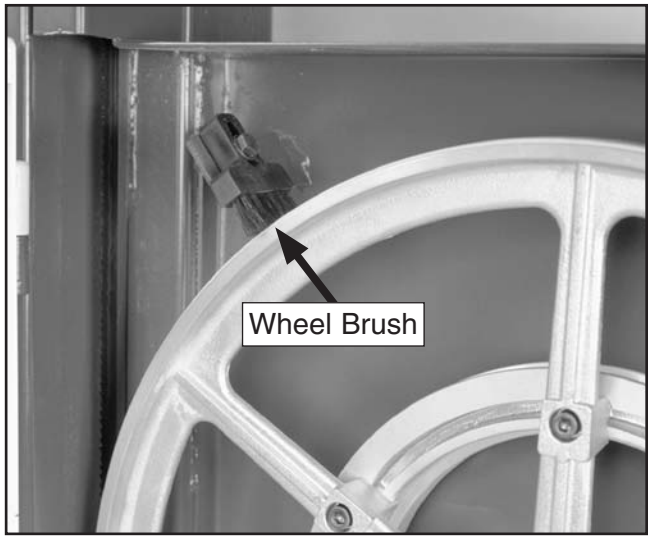


Figure 100. A wheel brush (one of two shown).

Tools Needed:	**Qty**
Wrench/Socket 10mm	2

To adjust the brushes:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the lower wheel cover.
3. Loosen the bolt/nut that secures each brush in place.
4. Adjust each brush so it makes good contact with the wheel or blade—without bending the bristles.
5. Tighten the bolt/nuts to secure each brush in place.

Adjusting Tension Lever

The quick release tension lever is setup correctly for use with the preinstalled 143" blade. However, if you install a different length blade, you will need to adjust the tension lever adjustment screw so the quick release tension lever works correctly.

Tools Needed:	**Qty**
Hex Wrench 5mm	1
Wrench 10mm	1

To adjust the tension lever:

1. DISCONNECT BANDSAW FROM POWER!
2. Open the wheel covers, remove the bandsaw blade, then install the new one (refer to **Blade Changes** on **Page 49**).
3. Loosen the jam nut on the tension adjustment screw 7-10 turns.
4. Put the quick release tension lever in the down (engaged) position, then turn the blade tension handwheel until the blade tension matches the mark on the blade tension scale for the appropriate blade thickness.
5. Thread the tension adjustment screw (**Figure 101**) down until it contacts the wheel block plate, then back it off 1-2 turns.

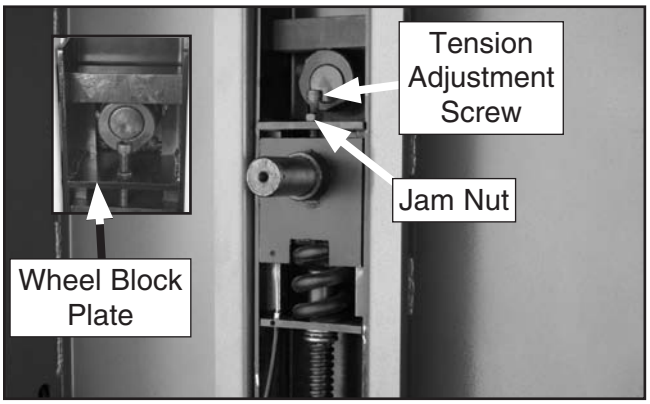


Figure 101. Example of quick release tension lever adjustment screw.

6. Tighten the jam nut.

Adjusting Guide Post Travel

The guide post assembly should remain parallel with the blade front-to-back and side-to-side along its length of travel. If it does not, follow these instructions to correctly adjust the guide post.

Tools Needed:

Machinist's Square 1
Small Ruler 1
Hex Wrench 4mm 1
Hex Wrench 5mm 1
Metal Shims ..... (As Needed)

Checking/Adjusting Guide Post Parallel with Blade Side-to-Side

1. DISCONNECT BANDSAW FROM POWER!

2. Tighten the blade to the tension that will be used during operation.

3. Loosen the guide post lock knob, raise the guide post and lock it in place, then place a machinist's square on the table next to the side of the blade as illustrated in **Figure 102**.

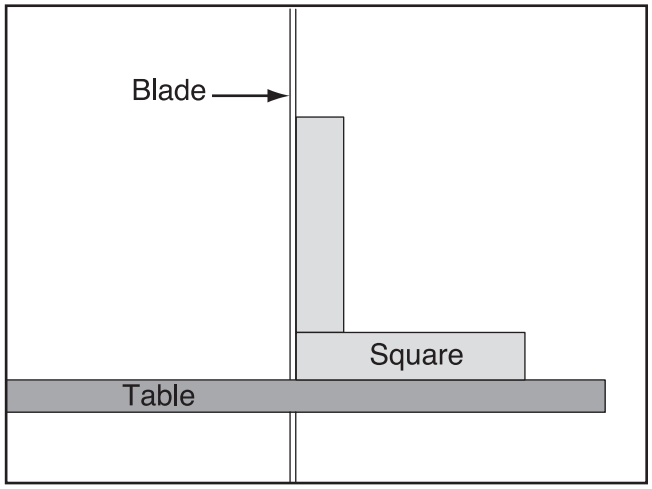


Figure 102. Squaring table to blade.

4. Adjust the table square with the blade using the table tilt knob, then secure it with the table tilt lock lever.

5. Loosen the guide post lock knob, lower the guide post to within 1" of the table top, then tighten the knob.

6. Place a machinist's square on the table next to the right hand side of the guide post, as shown in **Figure 103**.

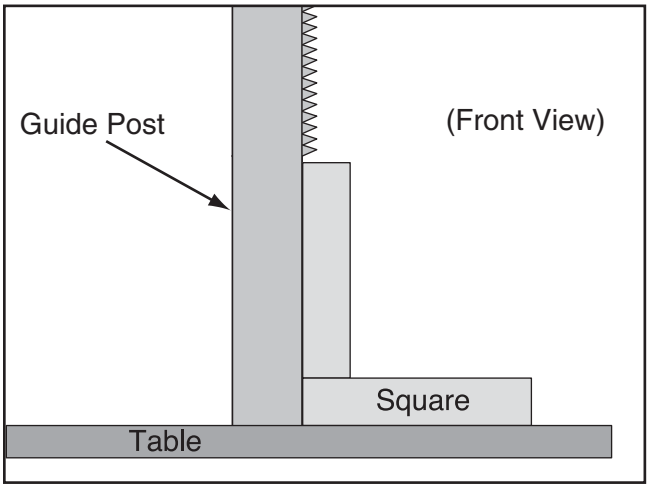


Figure 103. Example of checking guide post squareness.

—If there is no gap between the square and the guide post along its full length, no adjustments need to be made. Proceed to "To check/adjust if the guide post is parallel with the blade front-to-back."

—If there is a gap between the square and the guide post, the guide post is not parallel to the blade. Go to **Step 7**.

7. Loosen each of the four screws shown in **Figure 104** ¼ turn**.**

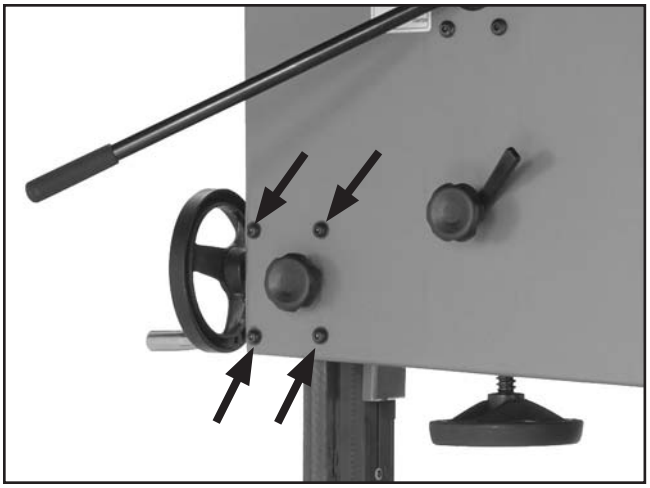


Figure 104. Guide post adjustment screws.

8. Gently tap the lower part of the guide post in the appropriate direction until there is no gap between the square and the guide post.

9. Tighten the screws shown in **Figure 104**.

Checking/Adjusting Guide Post Parallel with Blade Front-to-Back

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the guide post lock knob, lower the blade guide assembly to within 1" of the table top, then tighten the lock knob.

3. Remove the screws that secure the guide post guard and move it up and out of the way.

4. Measure the distance "A" between the top front face of the guide post rack and the back of the blade (see **Figure 105**).

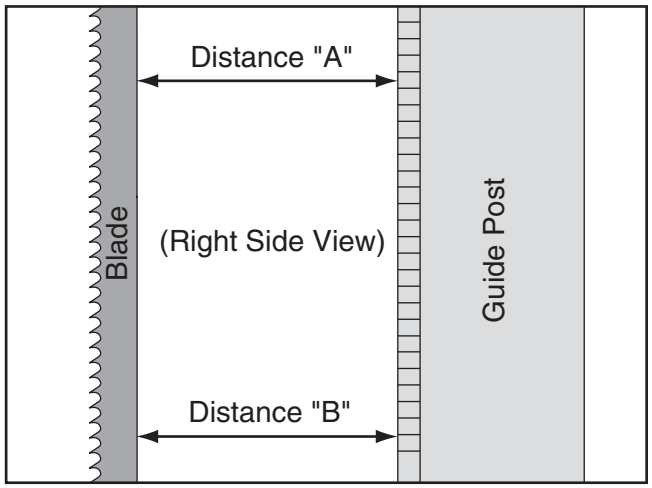


Figure 105. Example of measuring distance between rack and blade at top of guide post.

5. Measure the distance "B" between the bottom front face of the guide post rack and the back of the blade (see **Figure 105**).

   —If the measurements taken in **Steps 4–5** are equal, no adjustments need to be made. Go to **Step 9**.

   —If the measurements taken in **Steps 4–5** are not equal, go to **Step 6**.

6. Place the guide post guard on top of the guide post assembly so you can access the guide post bracket.

7. Loosen the four screws shown in **Figure 104** enough to fit metal shims between the frame and the guide post bracket (see **Figure 106**).

   —If the guide post to blade distance is greater at the bottom than at the top, place a shim between the bottom of the bracket and the frame (Shim "A"). This will tilt the bottom of the guide post toward the blade.

   —If the guide post to blade distance is less at the bottom than at the top, place a shim between the top of the bracket and the frame (Shim "B"). This will tilt the bottom of the guide post away from the blade.

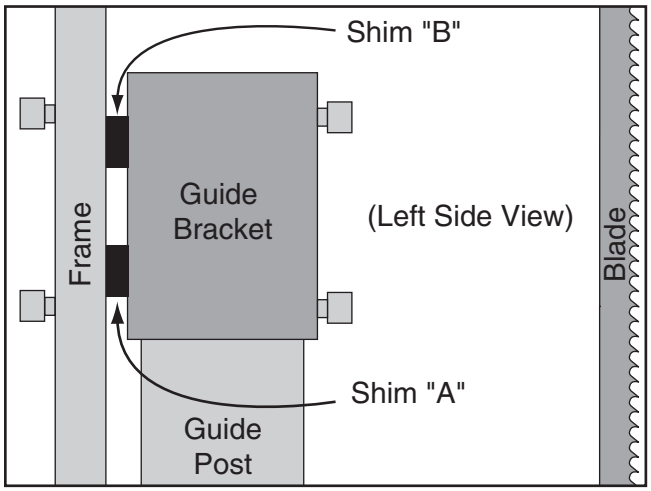


Figure 106. Location for placing shims.

8. Tighten the four screws shown in **Figure 104**, then repeat **Steps 4–5**.

   —If the measurements are equal, go to **Step 9**.

   —If the measurements are not equal, continue adding shims as needed until guide post rack to blade distance is the same at the top and bottom.

9. Reinstall the guide post guard with the screws removed in **Step 3**.

Aligning Wheels

Components and Hardware Needed: **Qty**
60" Long 2x4 1

Tools Needed:
Hex Wrenches 4 & 6 mm ..... 1 Ea
Wrench 13mm 1
Tape Measure.....1
Coplanarity Gauge (see **Figure 107**) 1
Straightedge .....
Fine Ruler.....1

Wheel alignment is one of the most critical factors for optimal performance from your bandsaw.

Heat, vibration, wandering, blade wear, tire wear and overall bandsaw wear are considerably decreased when the wheels are properly aligned or “coplanar.”

Coplanar wheels automatically track the blade by balancing it on the crown of the wheel. This is known as coplanar tracking.

Checking Coplanarity

1. Make the "Coplanarity Gauge" shown in **Figure 107**.

Note: *For best results, straighten the 2x4 with a jointer before cutting.*

2. DISCONNECT BANDSAW FROM POWER!

3. Remove the fence and open both wheel covers.

4. Adjust the blade guides away from the blade, loosen blade tension, remove the table insert and pin, then remove the blade.

5. Remove the table.

6. Reinstall the blade (**Page 49**), making sure the guide bearings and support bearings are away from the blade, then tighten your blade to the tension that it will be used during operation.

7. Place your coplanarity gauge up against both wheels in the positions shown in **Figure 108**.

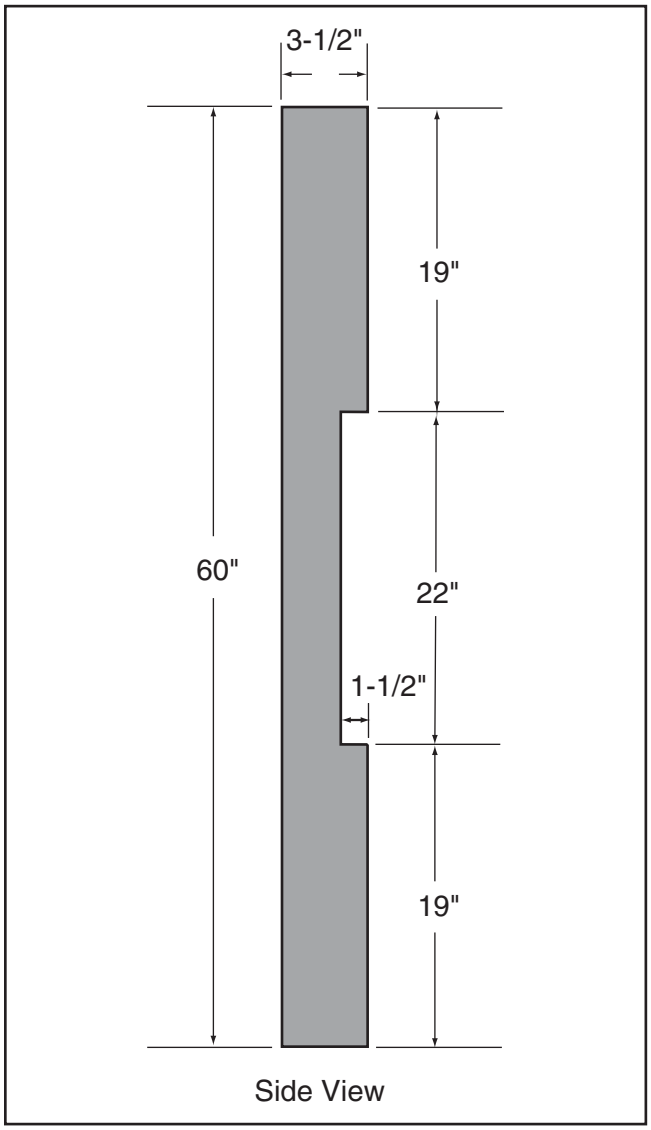


Figure 107. Dimensions of coplanarity gauge.

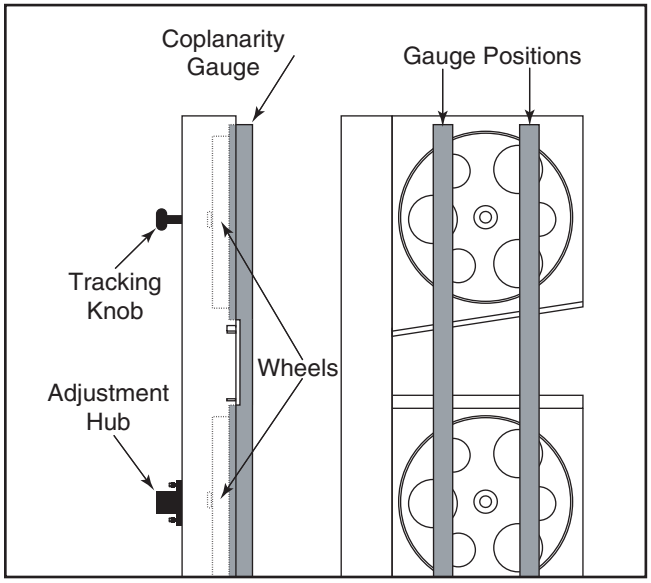


Figure 108. Checking for coplanarity.

—If the wheels are coplanar (**Figure 109**, **A**), the straightedge will evenly touch the top and bottom of both wheels.

—If the wheels are not coplanar (**Figure 109**, **B**), place the straightedge on the lower wheel first (ensuring that it touches both the top and bottom rim), then adjust the upper wheel tracking knob to make the upper wheel coplanar and parallel with the lower wheel.

—If the straightedge does not touch both wheels evenly, the lower wheel needs to be adjusted (**Figure 109, C**) or the upper wheel needs to be shimmed (**Figure 109, D**).

Shimming Upper Wheel

1. DISCONNECT BANDSAW FROM POWER!

2. Make sure the top wheel is adjusted parallel with the bottom wheel.

3. With a straightedge touching both points of the wheel that does not need to be adjusted, measure the distance away from the wheel that is out of adjustment (see **Figure 110**).

4. Remove the blade from the saw, then remove the wheel that needs to be shimmed.

5. Determine how many shim washers you need to compensate for the distance measured in **Step 3** and place them on the wheel shaft.

6. Replace the wheel, the original washers, the securing screw, and the blade.

7. Tighten the blade, then check the wheels with the coplanarity gauge. (Wheel coplanarity changes as the blade is tightened, so it is best to check the wheel alignment when the blade is tensioned as it would be for normal operations.)

8. When the wheels are coplanar, place a mark on each wheel where you held the straightedge. This assures repeated accuracy every time you adjust your wheels.

Note: *When wheels are properly coplanar, the blade may not be centered on the crown of the wheel, but it will be balanced.*

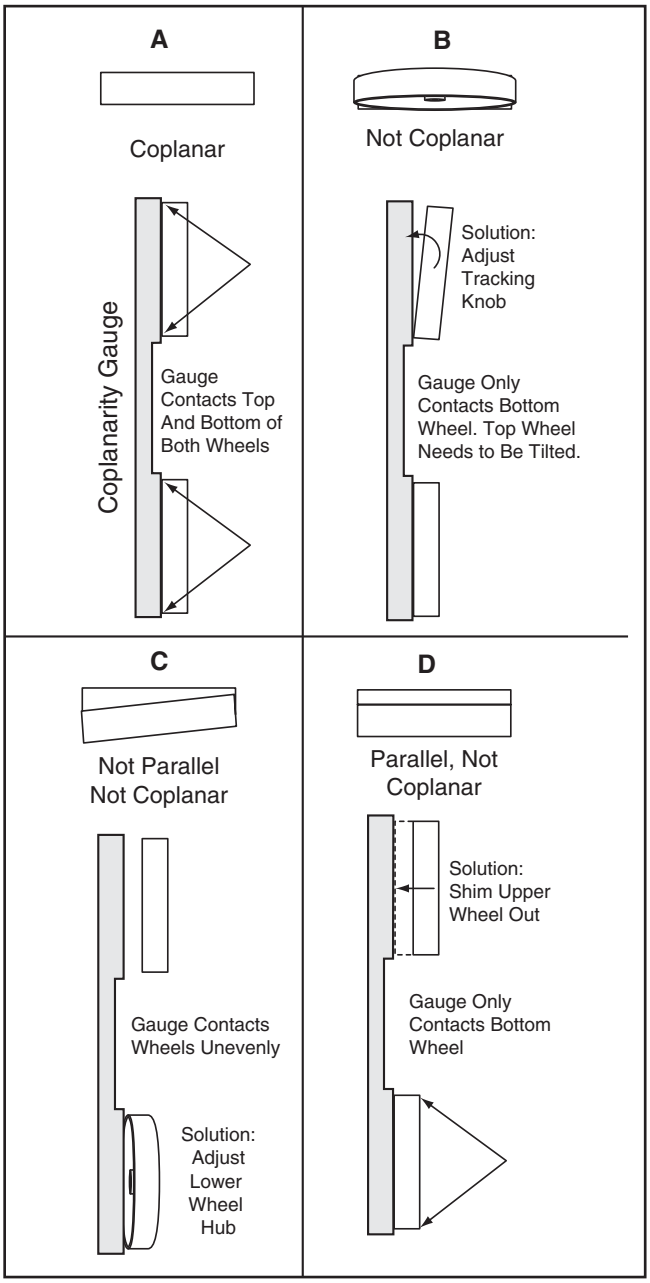


Figure 109. Coplanar diagram.

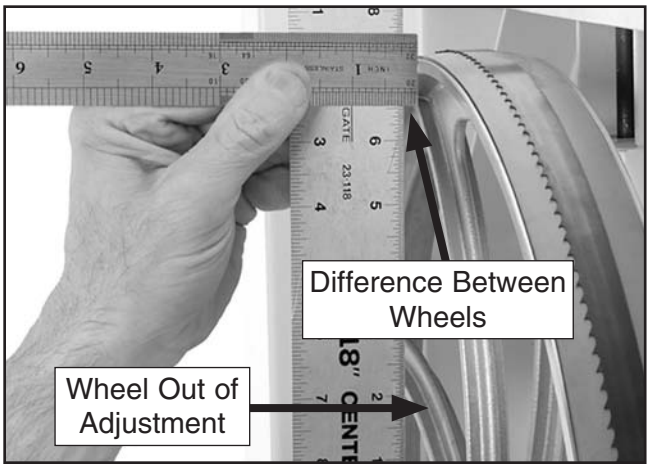


Figure 110. Determining distance needed to shim upper wheel.

Adjusting Lower Wheel

Only do this procedure if you cannot make the wheels coplanar with the tracking knob or by shimming the upper wheel. Make sure the upper wheel is adjusted as close as possible to being coplanar with the lower wheel before beginning. Do this procedure with the blade fully tensioned.

To adjust the lower wheel:

1. DISCONNECT BANDSAW FROM POWER!

2. Loosen the jam nuts on the lower wheel adjustment hub (see **Figure 111**).

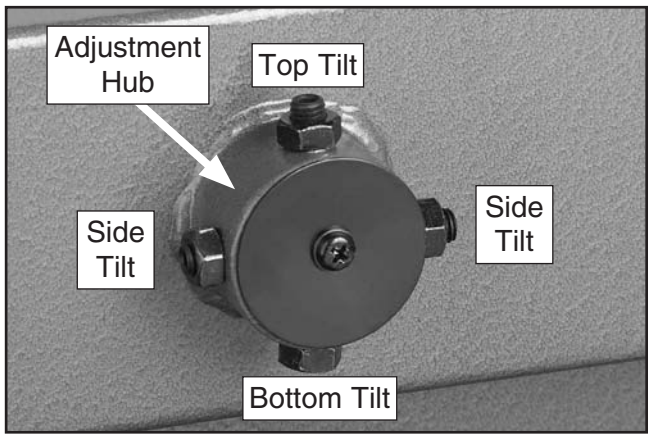


Figure 111. Lower wheel adjustment control.

3. Loosen one tilt adjustment set screw, then tighten the opposing set screw approximately an equal amount.

4. Check the wheels with the coplanarity gauge, then adjust the lower wheel at the hub as needed until it is parallel and coplanar with the top wheel.

5. Tighten the jam nuts to lock the tilt adjustment set screws in position.

SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

⚠WARNING
Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

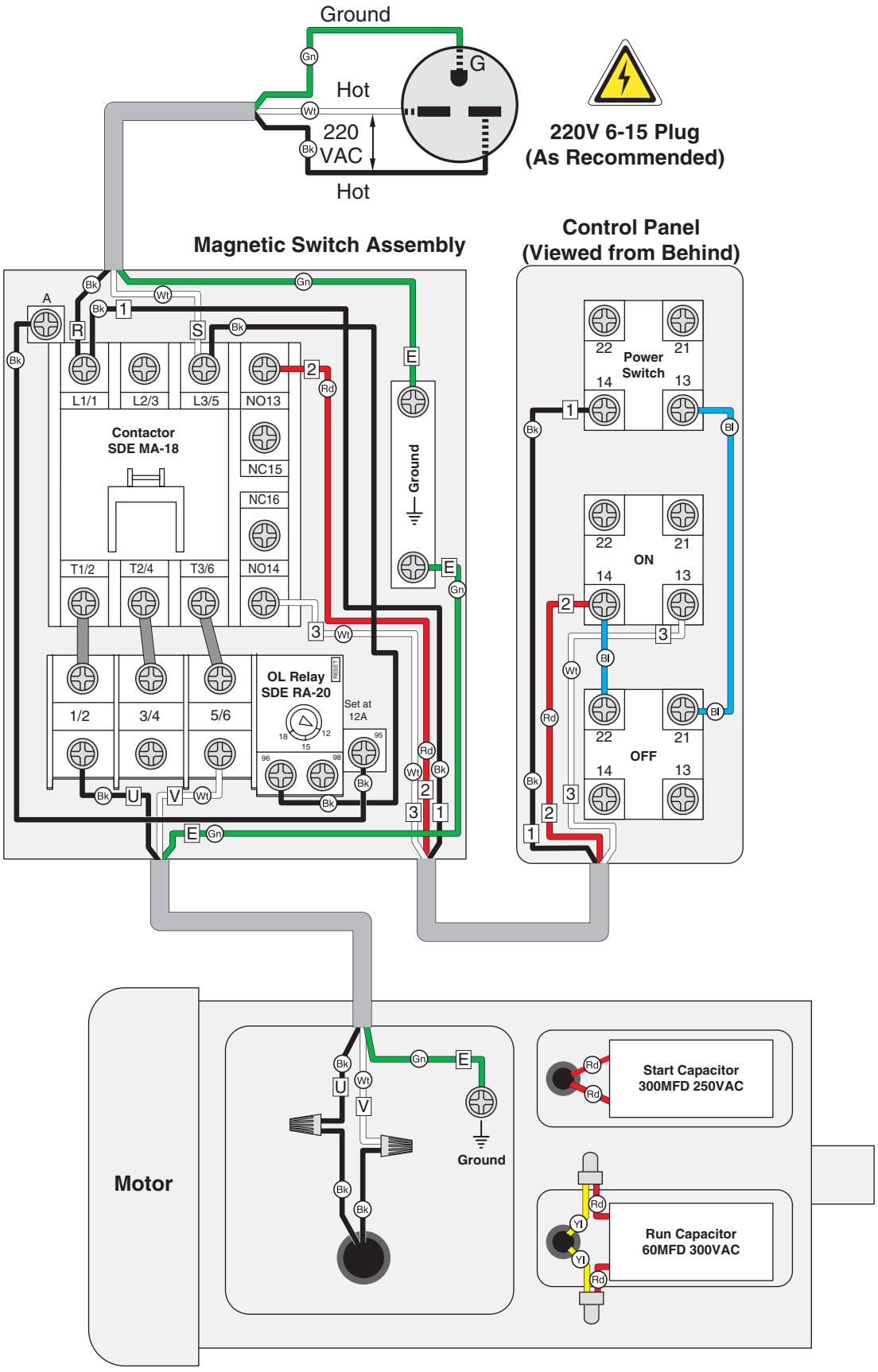
NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

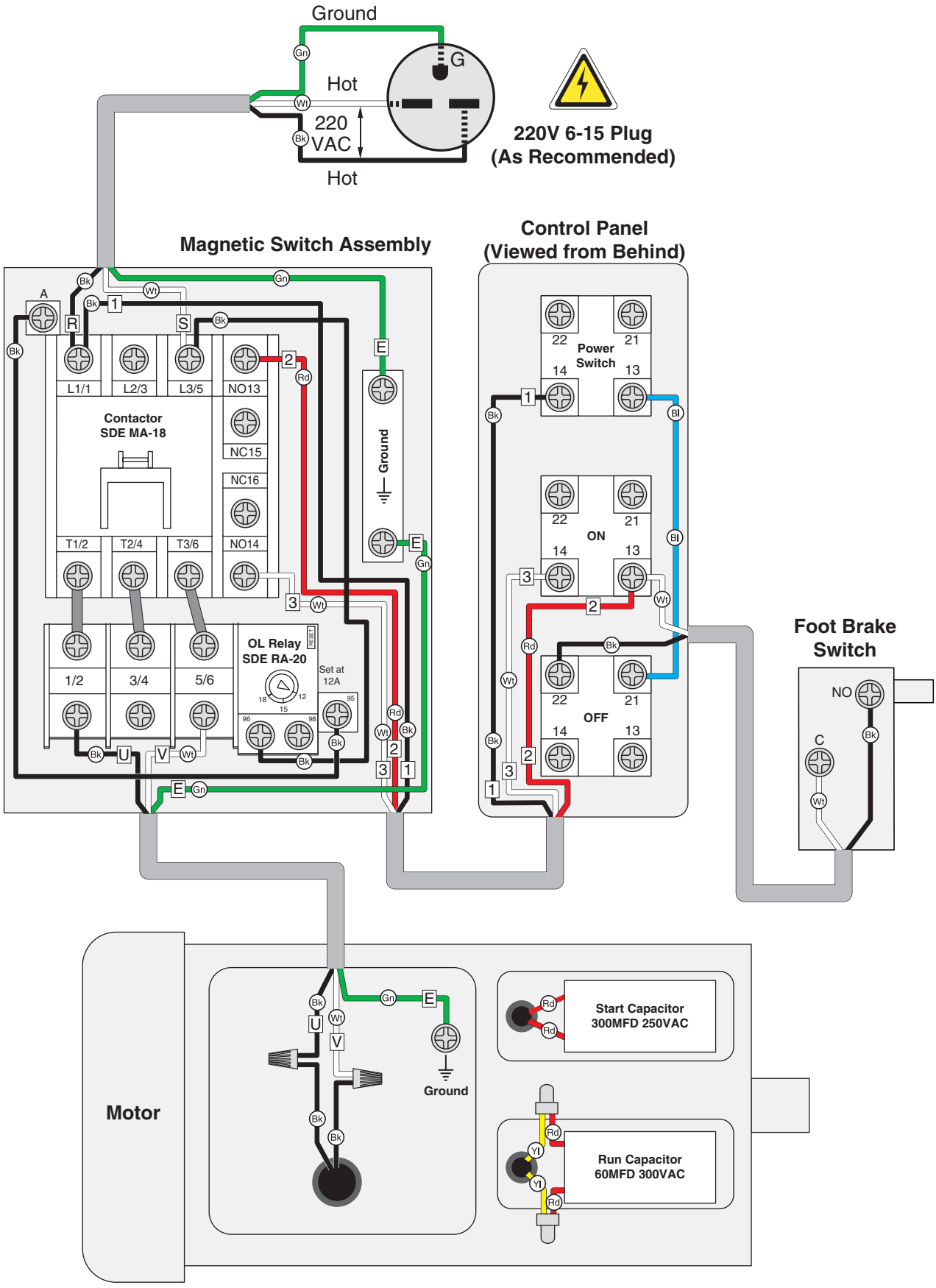
BLACK	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu		
RED	Rd	ORANGE	Or	PINK	Pk	TURQUOISE	Tu

G0514X Wiring Diagram



READ ELECTRICAL SAFETY ON PAGE 68!

G0514X2 Wiring Diagram



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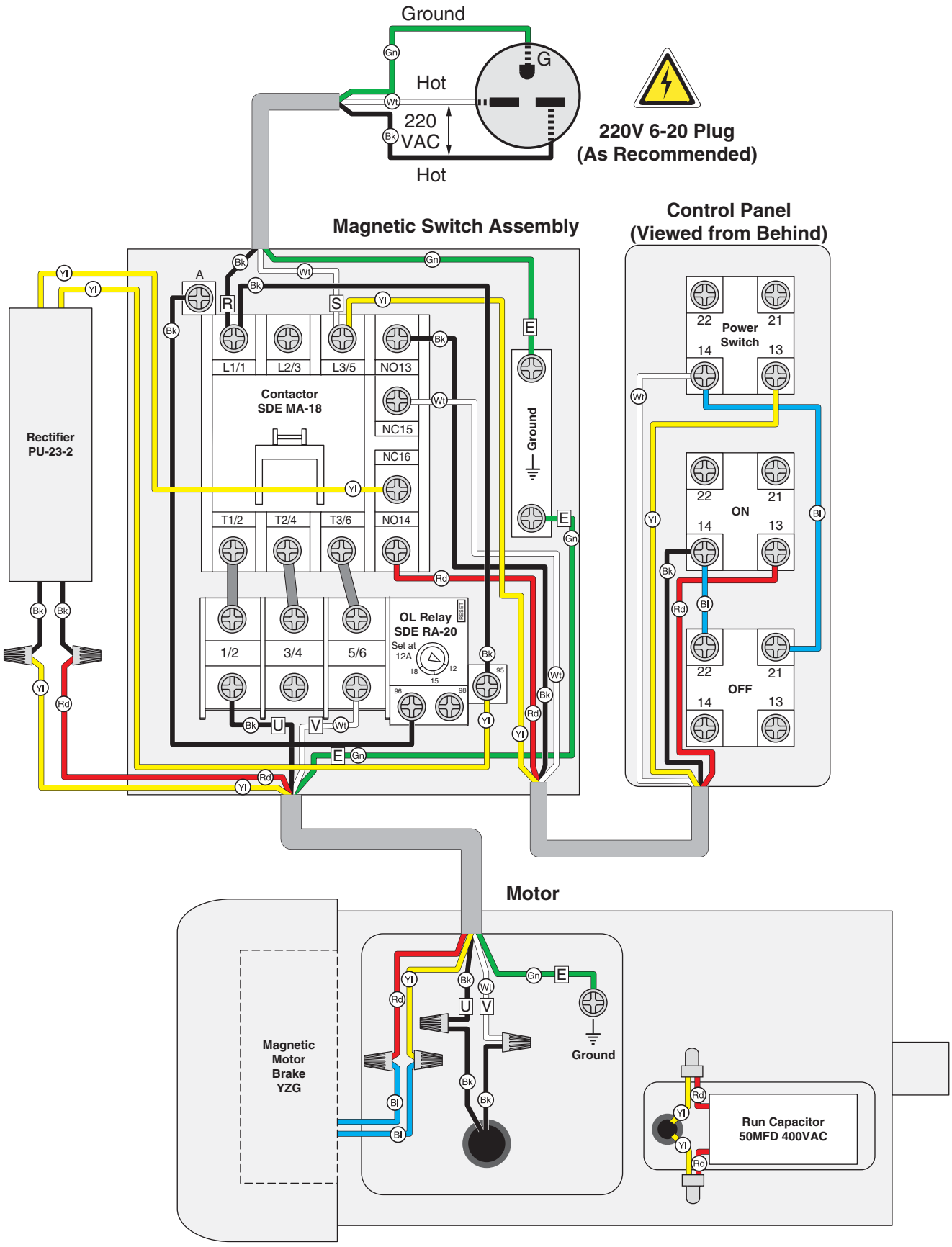
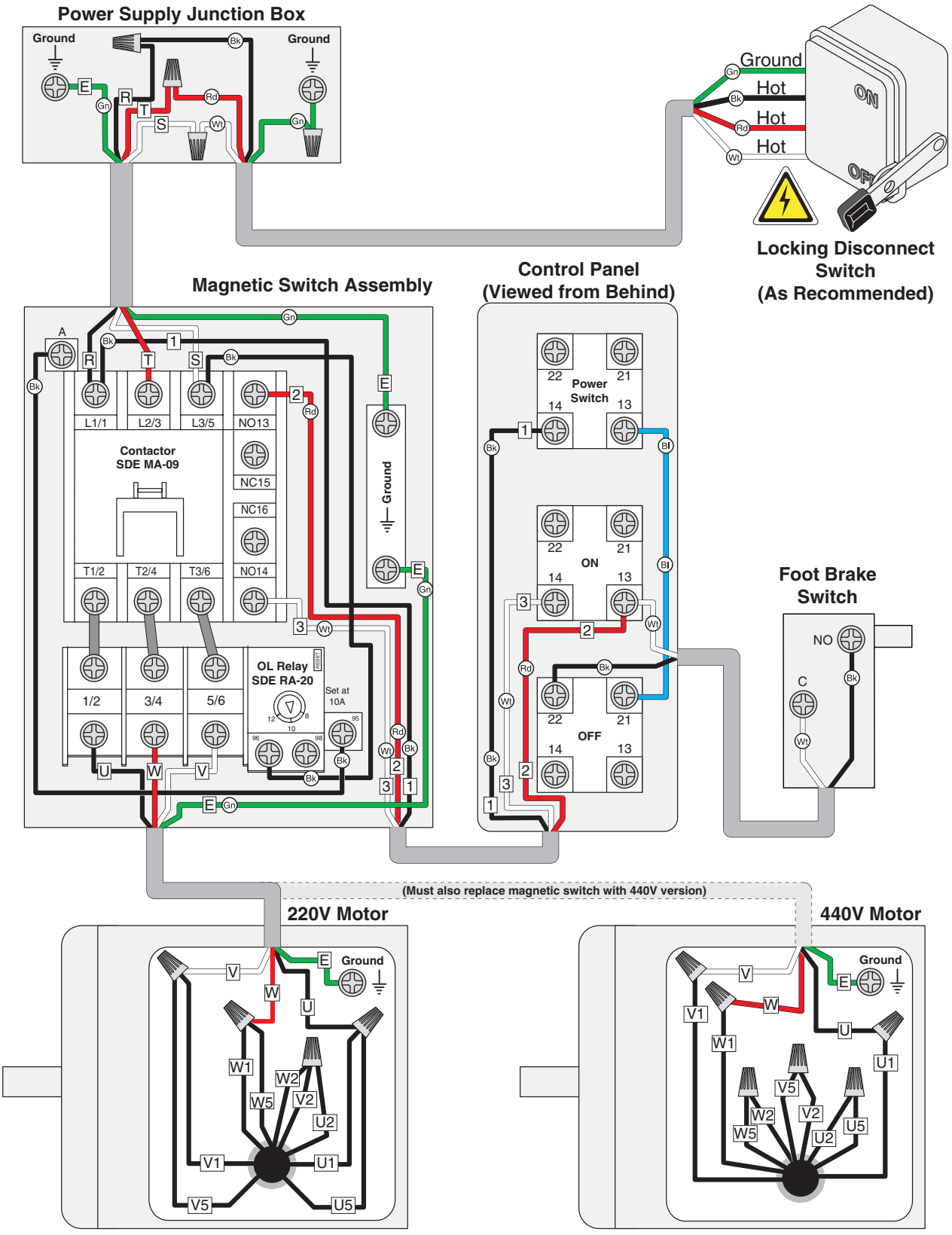
G0514X2B Wiring Diagram



READ ELECTRICAL SAFETY ON PAGE 68!

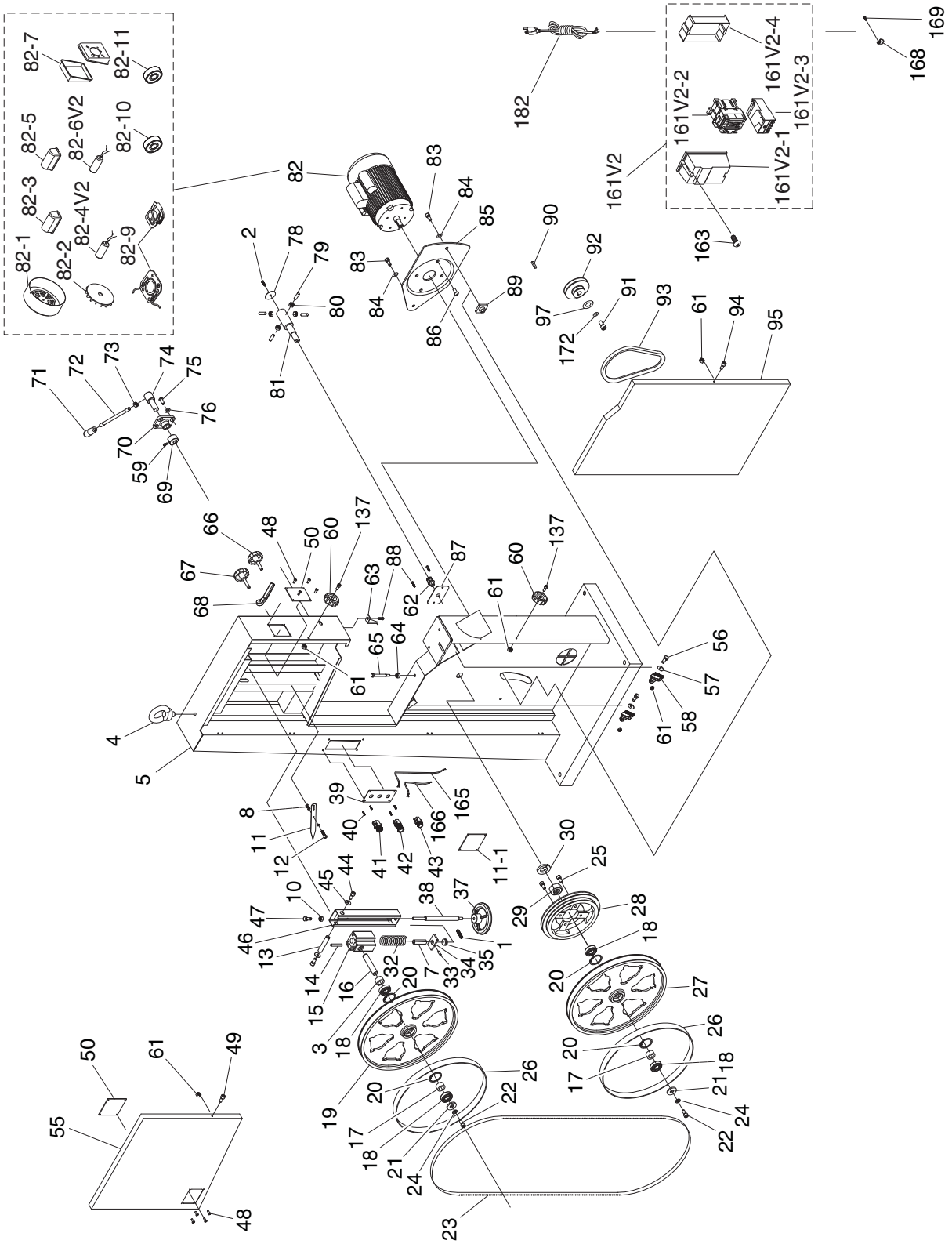
G0514X3 Wiring Diagram



STOP **READ ELECTRICAL SAFETY ON PAGE 68!**

SECTION 9: PARTS

G0514X Main

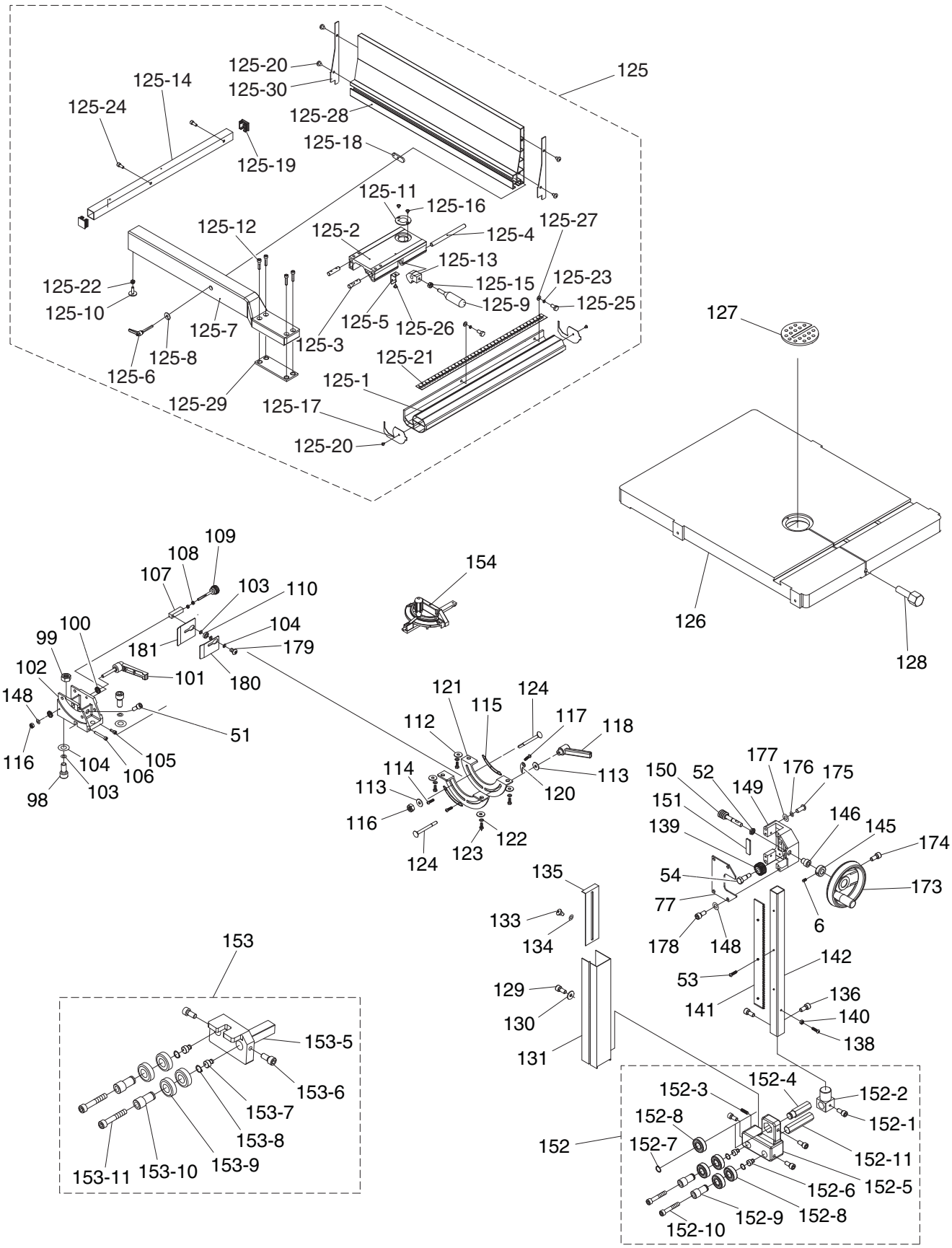


G0514X Main Parts List

REF	PART #	DESCRIPTION
1	PSS01M	SET SCREW M6-1 X 10
2	PFS07M	FLANGE SCREW M5-.8 X 10
3	P0513X003	BUSHING
4	P0513004	LIFTING EYE BOLT M10-1.5
5	P0514005	MACHINE BODY
7	P0513X007	BUSHING
8	PW03M	FLAT WASHER 6MM
10	PN01M	HEX NUT M6-1
11	P0513011	POINTER
11-1	P0640X221	TENSION SCALE LABEL
12	P0513012	SHOULDER SCREW M4-.7 X 5
13	P0513013	UPPER SHAFT
14	PRP10M	ROLL PIN 5 X 36
15	P0513015	UPPER WHEEL SHAFT HINGE
16	P0513016	UPPER WHEEL SHAFT
17	P0513017	BUSHING
18	P6204-2RS	BALL BEARING 6204 2RS
19	P0514X019	UPPER WHEEL 19"
20	PR25M	INT RETAINING RING 47MM
21	P0514X021	WHEEL FLAT WASHER 8MM
22	PCAP11M	CAP SCREW M8-1.25 X 16
23	P0514023	BLADE 6TPI HOOK 143"
24	PLW04M	LOCK WASHER 8MM
25	PCAP14M	CAP SCREW M8-1.25 X 20
26	T23072	URETHANE TIRE PAIR
27	P0514X027	LOWER WHEEL 19"
28	P0514X028	IDLER PULLEY
29	PN32	HEX NUT 1-14
30	PLW09	LOCK WASHER 1"
32	P0513032	COMPRESSION SPRING
33	PRP02M	ROLL PIN 3 X 16
34	P0513034	LOCATE BLOCK
35	P51201	THRUST BEARING 51201
37	P0513037	HANDWHEEL
38	P0513038	ADJUSTING BOLT
39	P0514X039	CONTROL PANEL PLATE
40	PHTEK15M	TAP SCREW M4 X 10
41	P0514X041	KEYED POWER SWITCH
42	P0514X042	ON BUTTON
43	P0514X043	OFF BUTTON
44	PCAP11M	CAP SCREW M8-1.25 X 16
45	PWF08M	FENDER WASHER 8MM
46	P0513046	UPPER WHEEL SLIDING BRACKET
47	PCAP106M	CAP SCREW M8-1.25 X 90
48	PRIV006M	STEEL BLIND RIVET 3 X 10MM
49	PCAP04M	CAP SCREW M6-1 X 10
50	P0513050	CLEAR WINDOW
55	P0514X055	UPPER WHEEL COVER
56	PCAP06M	CAP SCREW M6-1 X 25
57	PW03M	FLAT WASHER 6MM
58	P0513058	BRUSH
59	PCAP06M	CAP SCREW M6-1 X 25
60	P0513060	STAR HANDLE
61	PLN03M	LOCK NUT 6MM
62	P0513062	STRAIN RELIEF 16MM
63	P0513063	HEIGHT POINTER

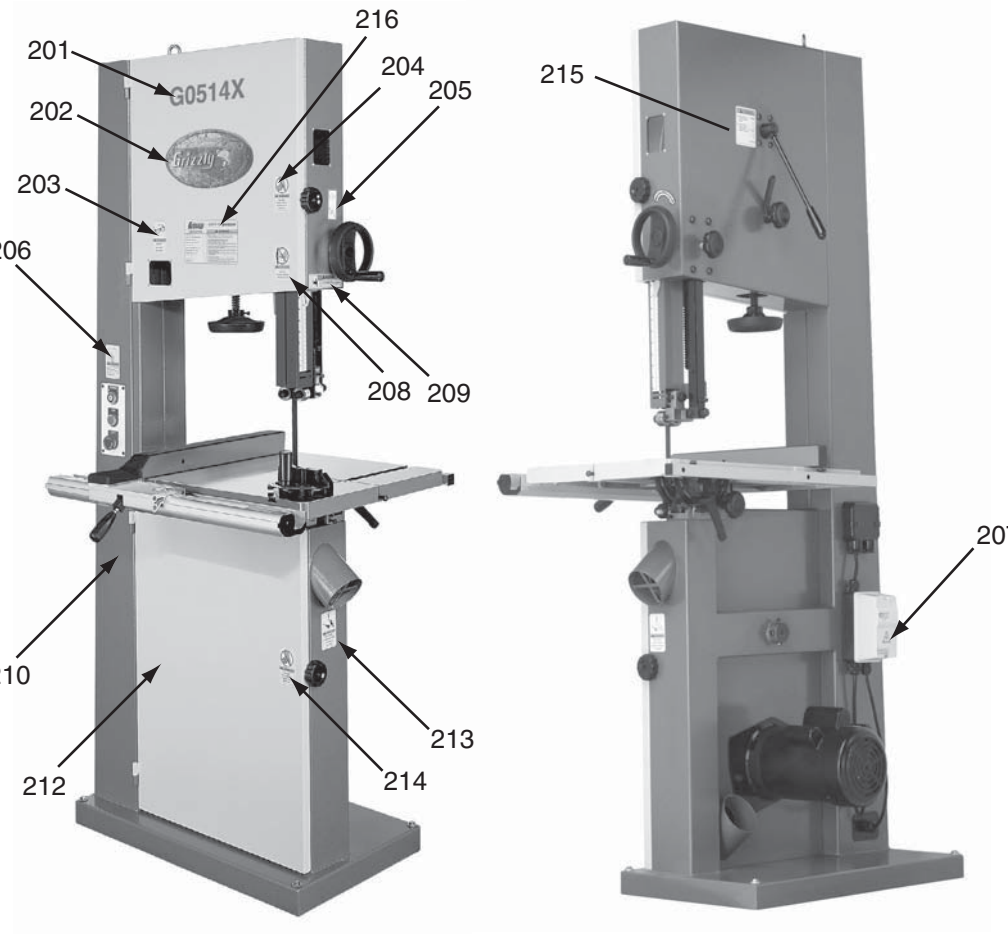
REF	PART #	DESCRIPTION
64	PN03M	HEX NUT M8-1.25
65	PB124M	HEX BOLT M8-1.25 X 90
66	P0513066	KNOB SCREW M10-1.5 X 20
67	P0513067	KNOB SCREW M10-1.5 X 55
68	P0513068	THREADED HANDLE 10MM
69	P0513069	CAM
70	P0513070	PILLOW BLOCK
71	P0513071	HANDLE M10-1.5
72	P0513072	LEVER ROD
73	PN09M	HEX NUT M12-1.75
74	P0513074	SHAFT
75	PBHS22M	BUTTON HD CAP SCR M8-1.25 X 20
76	PLW04M	LOCK WASHER 8MM
78	P0513078	COVER
79	PSS09M	SET SCREW M8-1.25 X 20
80	PN03M	HEX NUT M8-1.25
81	P0513081	LOWER WHEEL SHAFT
82	P0514X082	MOTOR 3HP 220V 1PH 60HZ
82-1	P0514X082-1	MOTOR FAN COVER
82-2	P0514X082-2	MOTOR FAN
82-3	P0514X082-3	CAPACITOR COVER
82-4V2	P0514X082-4V2	S CAPACITOR 300M 250V V2.05.11
82-5	P0514X082-3	CAPACITOR COVER
82-6V2	P0514X082-6V2	R CAPACITOR 60M 300V V2.02.11
82-7	P0514X082-7	MOTOR JUNCTION BOX
82-9	P0514X082-9	CENTRIFUGAL SWITCH W/ CONTACT PLATE
82-10	P0514X082-10	FRONT MOTOR BEARING
82-11	P0514X082-11	REAR MOTOR BEARING
83	PB32M	HEX BOLT M10-1.5 X 25
84	PLW06M	LOCK WASHER 10MM
85	P0513085	MOTOR BRACKET
86	PBHS22M	BUTTON HD CAP SCR M8-1.25 X 20
87	P0513087	PLATE
88	PFS07M	FLANGE SCREW M5-.8 X 10
89	P0513089	PILLOW BLOCK
90	PK15M	KEY 5 X 5 X 35
91	PB81M	HEX BOLT M8-1.25 X 20 LH
92	P0514X092	MOTOR PULLEY
93	PVA42	V-BELT A-42 4L420
94	PCAP04M	CAP SCREW M6-1 X 10
95	P0514X095	LOWER WHEEL COVER
97	PWF08M	FENDER WASHER 8MM
137	PCAP02M	CAP SCREW M6-1 X 20
161V2	P0514X161V2	MAG SWITCH ASSY 3HP 220V V2.05.11
161V2-1	P0514X161V2-1	SWITCH FRONT COVER
161V2-2	P0514X161V2-2	CONTACTOR SDE MA-18 220V
161V2-3	P0514X161V2-3	OL RELAY SDE RA-20 12-18A
161V2-4	P0514X161V2-4	SWITCH BACK COVER
163	PFS07M	FLANGE SCREW M5-.8 X 10
165	P0514X165	CONTROL CORD 16G 3W
166	P0514X166	MOTOR CORD 14G 3W
168	P0514X168	CORD CLAMP
169	PFS12M	FLANGE SCREW M5-.8 X 12
172	PLW04M	LOCK WASHER 8MM
182	P0514X182	POWER CORD 14G 3W 6-15

G0514X Fence/Guides



G0514X Fence/Guide Parts List

REF	PART #	DESCRIPTION
6	PSS07M	SET SCREW M5-.8 X 5
51	PCAP02M	CAP SCREW M6-1 X 20
52	P0514X052	WORM SHAFT THIN NUT
53	PFH31M	FLAT HD SCR M4-.7 X 8
54	P0514X054	STEP BOLT M8-1.25 X 80
77	P0514X077	COVER
98	PCAP84M	CAP SCREW M10-1.5 X 35
99	PN02M	HEX NUT M10-1.5
100	P0513100	SMALL GEAR
101	P0513X101	LOCK HANDLE
102	P0513102	TRUNNION SUPPORT BRACKET
103	PLW06M	LOCK WASHER 10MM
104	PW04M	FLAT WASHER 10MM
105	PB18M	HEX BOLT M6-1 X 20
106	PCAP30M	CAP SCREW M6-1 X 45
107	P0513107	PILLOW BLOCK
108	PN01M	HEX NUT M6-1
109	P0513109	ADJUST BOLT M6
110	P6000ZZ	BALL BEARING 6000ZZ
112	PW01M	FLAT WASHER 8MM
113	PW01M	FLAT WASHER 8MM
114	PS17M	PHLP HD SCR M4-.7 X 6
115	P0513115	GEAR PLATE
116	PLN04M	LOCK NUT M8-1.25
117	PS17M	PHLP HD SCR M4-.7 X 6
118	P0513118	LOCK HANDLE
120	P0513120	POINTER
121	P0514X121	TRUNNION
122	PLW04M	LOCK WASHER 8MM
123	PB03M	HEX BOLT M8-1.25 X 16
124	PCB23M	CARRIAGE BOLT M8-1.25 X 80
125	P0514X125	FENCE ASSEMBLY
125-1	PH7589001	FIXED BASE 710MM
125-2	PH7587002	ADJUST BASE
125-3	PH7587003	FIXED SHAFT
125-4	PH7587004	SHAFT
125-5	PH7587005	SPRING PIECE
125-6	PH7528004	ADJUSTMENT HANDLE M8 X 44
125-7	PH7589007	SUPPORT TUBE 640MM
125-8	PW01M	FLAT WASHER 8MM
125-9	PH7587009	FENCE HANDLE M8-1.25 X 22
125-10	PH7587010	ADJUST SCREW
125-11	PH7587011	CONVEX
125-12	PCAP06M	CAP SCREW M6-1 X 25
125-13	PH7587013	FIXED LUMP
125-14	PH7589014	REAR RAIL 710MM
125-15	PN03M	HEX NUT M8-1.25
125-16	PFS04M	FLANGE SCREW M4-.7 X 6
125-17	PH7587017	GUARD PIECE
125-18	PH7528002	MOVING PLATE
125-19	PH7587019	PLUGGED
125-20	PHTEK3M	TAP SCREW M3.5 X 8
125-21	PH7587021	SCALE
125-22	PN01M	HEX NUT M6-1
125-23	PLW03M	LOCK WASHER 6MM
125-24	PCAP01M	CAP SCREW M6-1 X 16
125-25	PB08M	HEX BOLT M6-1 X 20
125-26	PFB13M	FLANGE BOLT M4-.7 X 8
125-27	PW03M	FLAT WASHER 6MM
125-28	PH7589028	RESAW FENCE AL 640MM
125-29	PH7587029	SPACER PLATE
125-30	P0514X2B171-3	RESAW FENCE END PLATE
126	P0514X126	TABLE 26-3/4" X 19"
127	T24384	TABLE INSERT
128	P0513X128	TABLE PIN
129	PCAP50M	CAP SCREW M5-.8 X 10
130	PW02M	FLAT WASHER 5MM
131	P0514X131	GUIDE POST COVER
133	P0513X140	SHOULDER SCREW
134	P0513X141	FIBER WASHER 13MM
135	P0513X142	SLIDING PLATE
136	PCAP01M	CAP SCREW M6-1 X 16
138	PS38M	PHLP HD SCR M4-.7 X 10
139	P0513X122	GEAR
140	PN04M	HEX NUT M4-.7
141	P0513X144	RACK
142	P0513X145	UPPER GUIDE TUBE
145	P0514X145	LOCK COLLAR
146	P0513161	BUSHING
148	PLW04M	LOCK WASHER 8MM
149	P0513164	GUIDE BRACKET
150	P0513X134	WORM CYLINDER
151	P0513X135	FIXED PLATE
152	P0514X152	UPPER BLADE GUIDE ASSEMBLY
152-1	PCAP01M	CAP SCREW M6-1 X 16
152-2	P0513X150-2	UPPER GUIDE SUPPORT BLOCK
152-3	PSS01M	SET SCREW M6-1 X 10
152-4	P0513X150-4	ADJUST BAR
152-5	P0513X150-5	UPPER BLADE GUIDE SUPPORT
152-6	P0513X150-6	BIAS SHAFT
152-7	PR05M	EXT RETAINING RING 15MM
152-8	P6202ZZ	BALL BEARING 6202 ZZ
152-9	P0513X150-9	HANDLE BUSHING
152-10	PCAP48M	CAP SCREW M6-1 X 35
152-11	P0513X150-11	UPPER SPACING SLEEVE
153	P0514X153	LOWER BLADE GUIDE ASSEMBLY
153-5	P0513X151-5	LOWER BLADE GUIDE SUPPORT
153-6	PCAP01M	CAP SCREW M6-1 X 16
153-7	P0513X151-7	BIAS SHAFT
153-8	PR05M	EXT RETAINING RING 15MM
153-9	P6202ZZ	BALL BEARING 6202 ZZ
153-10	P0513X151-10	HANDLE BUSHING
153-11	PCAP48M	CAP SCREW M6-1 X 35
154	P0513X152	MITER GAUGE ASSEMBLY
173	P0514X173	GUIDE POST HANDWHEEL
174	PCAP02M	CAP SCREW M6-1 X 20
175	PBHS22M	BUTTON HD CAP SCR M8-1.25 X 20
176	PLW04M	LOCK WASHER 8MM
177	PW01M	FLAT WASHER 8MM
178	PCAP11M	CAP SCREW M8-1.25 X 16
179	PBHS25M	BUTTON HD CAP SCR M10-1.5 X 20
180	P0514X180	RIGHT CLAMP PLATE
181	P0514X181	LEFT CLAMP PLATE



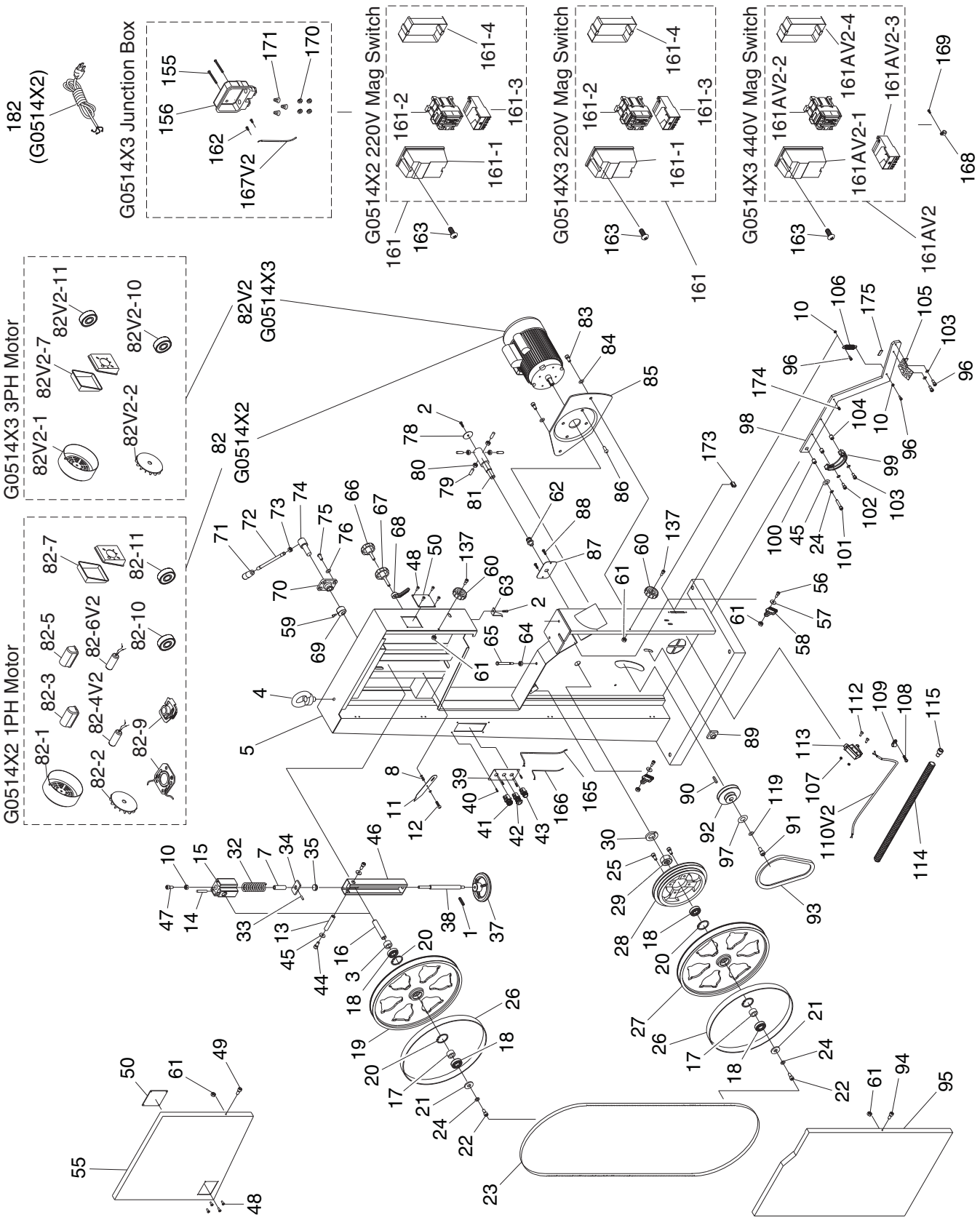
REF	PART #	DESCRIPTION
201	P0514X201	MODEL NUMBER LABEL
202	G8589	GRIZZLY LOGO PLATE
203	PLABEL-11	SAFETY GLASSES LABEL
204	PLABEL-20	OPEN DOOR LABEL
205	P0513X205	GUARD ADJ LABEL
206	PLABEL-12	READ MANUAL LABEL
207	PLABEL-14	ELECTRICITY LABEL
208	PLABEL-19	HANDS/BLADE LABEL

REF	PART #	DESCRIPTION
209	PLABEL-21	BS MOVING/ADJUST LABEL
210	PPAINT-1	GRIZZLY GREEN PAINT
212	PPAINT-11	PUTTY PAINT
213	PLABEL-18	DISCONNECT POWER LABEL
214	PLABEL-20	OPEN DOOR LABEL
215	P0513X214	TENSION ADJ LABEL
216	P0514X216	MACHINE ID LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

G0514X2 & G0514X3 Main



G0514X2 & G0514X3 Main Parts List

REF	PART #	DESCRIPTION
1	PSS01M	SET SCREW M6-1 X 10
2	PFS07M	FLANGE SCREW M5-.8 X 10
3	P0513X003	BUSHING
4	P0513004	LIFTING EYE BOLT M10-1.5
5	P0514X2005	MACHINE BODY
7	P0513X007	BUSHING
8	PW03M	FLAT WASHER 6MM
10	PN01M	HEX NUT M6-1
11	P0513011	TENSION POINTER
12	P0513012	STEP SCREW M4-.7 X 5
13	P0513013	SLEEVE
14	PRP91M	ROLL PIN 5 X 35
15	P0513015	UPPER WHEEL SHAFT HINGE
16	P0513016	UPPER WHEEL SHAFT
17	P0513017	BUSHING
18	P6204-2RS	BALL BEARING 6204 2RS
19	P0514X019	UPPER WHEEL 19"
20	PR25M	INT RETAINING RING 47MM
21	P0514X021	WHEEL FLAT WASHER 8MM
22	PCAP11M	CAP SCREW M8-1.25 X 16
23	P0514023	BLADE 6TPI HOOK 143"
24	PLW04M	LOCK WASHER 8MM
25	PCAP14M	CAP SCREW M8-1.25 X 20
26	T23072	URETHANE TIRE (PAIR)
27	P0514X027	LOWER WHEEL 19"
28	P0514X2028	IDLER PULLEY
29	PN32	HEX NUT 1-14
30	PLW09	LOCK WASHER 1"
32	P0513032	COMPRESSION SPRING 7 X 8 X 90
33	PRP02M	ROLL PIN 3 X 16
34	P0513034	SPRING BASE PLATE
35	P51201	THRUST BEARING 51201
37	P0513037	TENSION HANDWHEEL
38	P0513038	ADJUSTMENT SHAFT
39	P0514X039	CONTROL PANEL
40	PHTEK15M	TAP SCREW M4 X 10
41	P0514X041	KEYED POWER SWITCH
42	P0514X042	ON BUTTON
43	P0514X043	OFF BUTTON
44	PCAP11M	CAP SCREW M8-1.25 X 16
45	PWF08M	FENDER WASHER 8MM
46	P0513046	UPPER WHEEL SLIDING BRACKET
47	PCAP168M	CAP SCREW M6-1 X 90
48	PRIV006M	STEEL BLIND RIVET 3 X 10MM
49	PCAP26M	CAP SCREW M6-1 X 12
50	P0513050	CLEAR WINDOW
55	P0514055	WHEEL COVER UPPER
56	PCAP06M	CAP SCREW M6-1 X 25
57	PW03M	FLAT WASHER 6MM
58	P0513058	WHEEL BRUSH
59	PCAP06M	CAP SCREW M6-1 X 25
60	P0513060	STAR HANDLE

REF	PART #	DESCRIPTION
61	PLN03M	LOCK NUT M6-1
62	P0513062	STRAIN RELIEF 16MM
63	P0513063	HEIGHT POINTER
64	PN03M	HEX NUT M8-1.25
65	PB124M	HEX BOLT M8-1.25 X 90
66	P0513066	KNOB BOLT M10-1.5 X 20
67	P0513067	KNOB BOLT M10-1.5 X 53
68	P0513068	THREADED HANDLE 10MM
69	P0513069	CAM
70	P0513070	HUB BRACKET
71	P0513071	KNOB
72	P0513072	LEVER
73	PN09M	HEX NUT M12-1.75
74	P0513074	LEVER HUB
75	PBHS01M	BUTTON HD CAP SCR M8-1.25 X 20
76	PLW04M	LOCK WASHER 8MM
78	P0513078	SHAFT END CAP
79	PSS09M	SET SCREW M8-1.25 X 20
80	PN03M	HEX NUT M8-1.25
81	P0514X2081	LOWER WHEEL SHAFT
83	PB32M	HEX BOLT M10-1.5 X 25
84	PLW06M	LOCK WASHER 10MM
85	P0513085	MOTOR MOUNT PLATE
86	PBHS01M	BUTTON HD CAP SCR M8-1.25 X 20
87	P0513087	PLATE
88	PFS07M	FLANGE SCREW M5-.8 X 10
89	P0513089	GUIDE KEY
90	PK15M	KEY 5 X 5 X 35
91	PB81M	HEX BOLT M8-1.25 X 20 LH
92	P0514X092	MOTOR PULLEY
93	PVA42	V-BELT A42
94	PCAP04M	CAP SCREW M6-1 X 10
95	P0514X095	LOWER WHEEL COVER
96	PCAP01M	CAP SCREW M6-1 X 16
97	PWF08M	FENDER WASHER 8MM
98	P0514X2098	BRAKE LEVER
99	P0514X2099	BRAKE PAD
100	P0514X2100	BUSHING
101	PCAP31M	CAP SCREW M8-1.25 X 25
102	PCAP06M	CAP SCREW M6-1 X 25
103	PLW03M	LOCK WASHER 6MM
104	P0514X2104	BUSHING
105	P0514X2105	BRAKE PEDAL PAD
106	P0514X2106	EXTENSION SPRING
107	PN04M	HEX NUT M4-.7
108	PHTEK4M	TAP SCREW M4 X 8
109	P0514X2109	CORD CLAMP 5/8"
110V2	P0514X2110V2	BRAKE SWITCH CORD V2.05.11
112	PS51M	PHLP HD SCR M4-.7 X 30
113	P0514X2113	BRAKE SWITCH KL7141
114	P0514X2114	CORD CONDUIT 1/2" X 43-5/16"
115	P0514X2115	STRAIN RELIEF

G0514X2 & G0514X3 Main Parts List

REF	PART #	DESCRIPTION
119	PLW04M	LOCK WASHER 8MM
137	PCAP02M	CAP SCREW M6-1 X 20
163	PFS07M	FLANGE SCREW M5-.8 X 10
165	P0514X165	CONTROL CORD 16G 3W
166	P0514X166	MOTOR CORD 14G 3W
166	P0514X3166	MOTOR CORD 14G 4W

REF	PART #	DESCRIPTION
168	P0514X168	CORD CLAMP
169	PFS12M	FLANGE SCREW M5-.8 X 12
173	P0514X2173	STRAIN RELIEF 9 X 10MM
174	P0514X2174	SET BOLT M7-1 X 10 NYLON
175	P0514X2175	SPACER NYLON
182	P0514X182	POWER CORD 14AWG 3C 6-15 (G0514X2)

G0514X3 Power Connection Junction Box

REF	PART #	DESCRIPTION
155	PFS09M	FLANGE SCREW M5-.8 X 50
156	P0514X156	TERMINAL BOX
162	PS38M	PHLP HD SCR M4-.7 X 10

REF	PART #	DESCRIPTION
167V2	P0514X167V2	GROUNDING WIRE 90MM V2.05.11
170	PTLW02M	EXT TOOTH WASHER 5MM
171	P0514X171	WIRE NUT P3

G0514X2 220V Motor

REF	PART #	DESCRIPTION
82	P0514X2082	MOTOR 3HP 220V 1PH 60HZ
82-1	P0514X2082-1	MOTOR FAN COVER
82-2	P0514X2082-2	MOTOR FAN
82-3	P0514X2082-3	START CAPACITOR COVER
82-4V2	P0514X2082-4V2	S CAPACITOR 300M 250V V2.05.11
82-5	P0514X2082-5	R CAPACITOR COVER

REF	PART #	DESCRIPTION
82-6V2	P0514X2082-6V2	R CAPACITOR 60M 300V V2.05.11
82-7	P0514X2082-7	MOTOR JUNCTION BOX
82-9	P0514X2082-9	CENTRIFUGAL SWITCH W/ CONTACT PLATE
82-10	P0514X2082-10	FRONT MOTOR BEARING
82-11	P0514X2082-11	REAR MOTOR BEARING

G0514X3 220V Motor

REF	PART #	DESCRIPTION
82V2	P0514X3082	MOTOR 3HP 220/440V 3PH 60HZ
82V2-1	P0514X3082V2-1	MOTOR FAN COVER
82V2-2	P0514X3082V2-2	MOTOR FAN

REF	PART #	DESCRIPTION
82V2-7	P0514X3082V2-7	MOTOR JUNCTION BOX
82V2-10	P0514X3082V2-10	FRONT MOTOR BEARING
82V2-11	P0514X3082V2-11	REAR MOTOR BEARING

G0514X2 220V Magnetic Switch

REF	PART #	DESCRIPTION
161	P0514X161	MAG SWITCH ASSY 3HP 1PH 220V
161-1	P0514X2161-1	MAG SWITCH BACK COVER
161-2	P0514X2161-2	CONTACTOR SDE MA-18

REF	PART #	DESCRIPTION
161-3	P0514X2161-3	OL RELAY SDE RA-20 12-18A
161-4	P0514X2161-4	MAG SWITCH FRONT COVER

G0514X3 220V Magnetic Switch

REF	PART #	DESCRIPTION
161	P0514X3161	MAG SWITCH ASSY 220V
161-1	P0514X3161-1	SWITCH BACK COVER 220V
161-2	P0514X3161-2	CONTACTOR SDE MA-09 220V

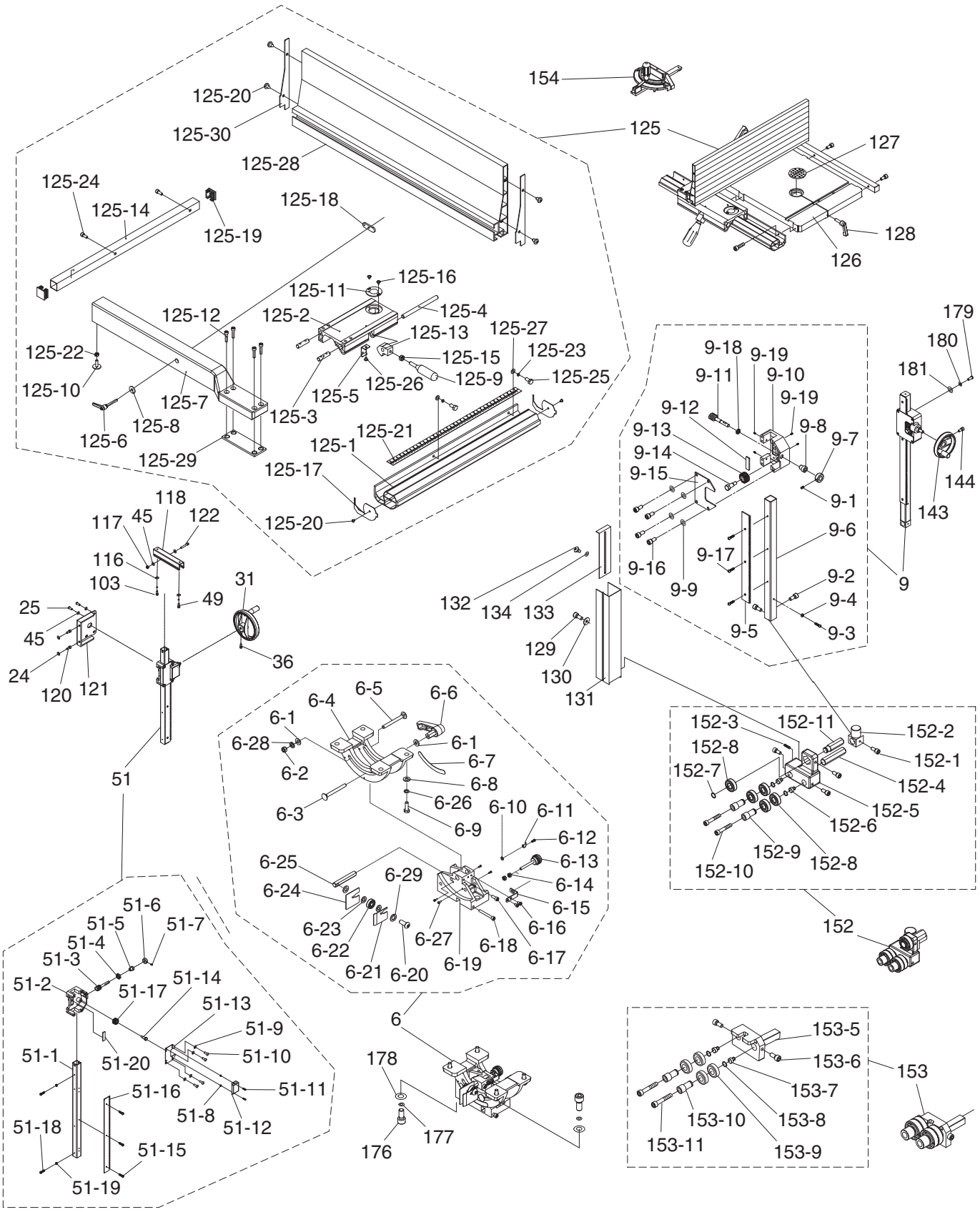
REF	PART #	DESCRIPTION
161-3	P0514X3161-3	OL RELAY SDE RA-20 8-12A
161-4	P0514X3161-4	SWITCH FRONT COVER 220V

G0514X3 440V Magnetic Switch

REF	PART #	DESCRIPTION
161AV2	P0514X3161AV2	MAG SWITCH ASSY 440V V2.05.11
161AV2-1	P0514X3161AV2-1	MAG SWITCH BACK COVER
161AV2-2	P0514X3161AV2-2	CONTACTOR SDE MA-09 440V

REF	PART #	DESCRIPTION
161AV2-3	P0514X3161AV2-3	OL RELAY SDE RA-20 5-8A
161AV2-4	P0514X3161AV2-4	MAG SWITCH FRONT COVER

G0514X2 & G0514X3 Fence & Guides



G0514X2 & G0514X3 Fence & Guides Parts List

REF	PART #	DESCRIPTION
6	P0514X2006	TRUNNION ASSEMBLY
6-1	PWF08M	FENDER WASHER 8MM
6-2	PLN04M	LOCK NUT M8-1.25
6-3	PCB10M	CARRIAGE BOLT M8-1.25 X 85
6-4	P0513X2162	TRUNNION
6-5	PCB23M	CARRIAGE BOLT M8-1.25 X 80
6-6	P0513118	LOCK HANDLE
6-7	P0513X2165	ANGLE SCALE
6-8	PW01M	FLAT WASHER 8MM
6-9	PB07M	HEX BOLT M8-1.25 X 25
6-10	PW05M	FLAT WASHER 4MM
6-11	P0513120	TILT POINTER
6-12	PS17M	PHLP HD SCR M4-.7 X 6
6-13	P0513109	ADJUSTMENT KNOB BOLT M6-1
6-14	PN01M	HEX NUT M6-1
6-15	P0513X2174	L-BRACKET
6-16	PFH39M	FLAT HD SCR M5-.8 X 16
6-17	PCAP01M	CAP SCREW M6-1 X 16
6-18	PCAP37M	CAP SCREW M6-1 X 50
6-19	P0513X2178	TRUNNION SUPPORT BRACKET
6-20	PBHS19M	BUTTON HD CAP SCR M10-1.5 X 30
6-21	P0513X2181	RIGHT CLAMP PLATE
6-22	P6000ZZ	BALL BEARING 6000ZZ
6-23	PW04M	FLAT WASHER 10MM
6-24	P0513X2184	LEFT CLAMP PLATE
6-25	P0513X2185	ADJUSTMENT BLOCK
6-26	PLW04M	LOCK WASHER 8MM
6-27	PCAP97M	CAP SCREW M5-.8 X 6
6-28	PLW04M	LOCK WASHER 8MM
6-29	PLW06M	LOCK WASHER 10MM
9	P0514X2009	UPPER GUIDE POST ASSEMBLY
9-1	PSS07M	SET SCREW M5-.8 X 5
9-2	PCAP01M	CAP SCREW M6-1 X 16
9-3	PS38M	PHLP HD SCR M4-.7 X 10
9-4	PN04M	HEX NUT M4-.7
9-5	P0514X2009-5	RACK
9-6	P0513X146	GUIDE POST
9-7	P0514X145	LOCK COLLAR
9-8	P0513X130	BUSHING
9-9	PLW04M	LOCK WASHER 8MM
9-10	P0513X133	GUIDE POST BRACKET
9-11	P0513X134	WORM SHAFT
9-12	P0513X135	FIXED PLATE
9-13	P0513X122	GEAR 15T
9-14	P0514X2009-14	GEAR STEP BOLT
9-15	P0514X077	COVER PLATE
9-16	PCAP11M	CAP SCREW M8-1.25 X 16
9-17	PFH31M	FLAT HD SCR M4-.7 X 8

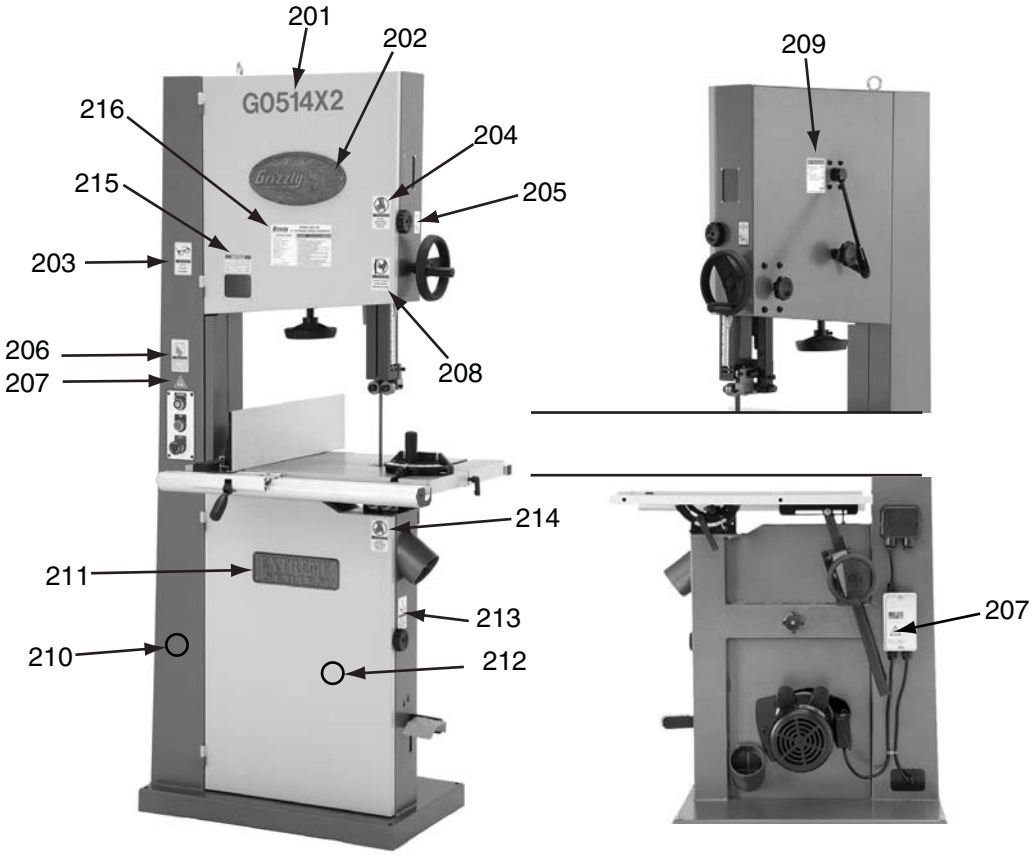
REF	PART #	DESCRIPTION
9-18	PN05M	HEX NUT M16-1.5
9-19	P0514X2009-19	GUIDE BRACKET PLASTIC SET SCREW
24	PLW04M	LOCK WASHER 8MM
25	PCAP14M	CAP SCREW M8-1.25 X 20
31	P0514X2031	TABLE TILT HANDWHEEL
36	PCAP06M	CAP SCREW M6-1 X 25
45	PWF08M	FENDER WASHER 8MM
49	PCAP26M	CAP SCREW M6-1 X 12
51	P0514X2051	TABLE TILT BRACKET ASSEMBLY
51-1	P0566243	SQUARE TUBE
51-2	P0566213	GUIDE BRACKET
51-3	P0566225	WORM SHAFT
51-4	PN05M	HEX NUT M16-1.5
51-5	P0566230	BUSHING
51-6	P0566231	LOCK COLLAR 22 X 10 X 10MM
51-7	PSS07M	SET SCREW M5-.8 X 5
51-8	PN06M	HEX NUT M5-.8
51-9	PLW04M	LOCK WASHER 8MM
51-10	PCAP11M	CAP SCREW M8-1.25 X 16
51-11	PFS07M	FLANGE SCREW M5-.8 X 10
51-12	P0566187	PINION GEAR COVER
51-13	P0566192	BRACKET COVER
51-14	P0566239	PINION GEAR STEP BOLT
51-15	PFH31M	FLAT HD SCR M4-.7 X 8
51-16	P0566242	RACK
51-17	P0566246	PINION GEAR 15T
51-18	PS38M	PHLP HD SCR M4-.7 X 10
51-19	PN04M	HEX NUT M4-.7
51-20	P0514X2051-20	FIXED PLATE
103	PLW03M	LOCK WASHER 6MM
116	PW03M	FLAT WASHER 6MM
117	PLN04M	LOCK NUT M8-1.25
118	P0514X2118	SLIDING PLATE
120	PB09M	HEX BOLT M8-1.25 X 20
121	P0514X2121	TRUNNION PLATE
122	PCAP60M	CAP SCREW M8-1.25 X 55
125	P0514X125	FENCE SET ASSEMBLY
125-1	PH7589001	FRONT RAIL 720MM
125-2	PH7587002	FENCE BASE
125-3	PH7587003	ALIGNMENT ROD
125-4	PH7587004	LOCK ROD
125-5	PH7587005	LOCK PLATE
125-6	PH7528004	LOCK HANDLE M8-1.25 X 44
125-7	PH7589007	FENCE 640MM
125-8	PW01M	FLAT WASHER 8MM
125-9	PH7587009	LOCK LEVER
125-10	PH7587010	REAR FENCE STANDOFF
125-11	PH7587011	SCALE WINDOW

G0514X2 & G0514X3 Fence & Guides Parts List

REF	PART #	DESCRIPTION
125-12	PCAP06M	CAP SCREW M6-1 X 25
125-13	PH7587013	LOCK WEDGE
125-14	PH7589014	REAR RAIL 710MM
125-15	PN03M	HEX NUT M8-1.25
125-16	PFS04M	FLANGE SCREW M4-.7 X 6
125-17	PH7587017	FRONT RAIL END PLATE
125-18	PH7528002	GUIDE PLATE
125-19	PH7587019	REAR RAIL END PLUG
125-20	PHTEK3M	TAP SCREW M3.5 X 8
125-21	PH7588021	SCALE 21-1/2"
125-22	PN01M	HEX NUT M6-1
125-23	PLW03M	LOCK WASHER 6MM
125-24	PCAP01M	CAP SCREW M6-1 X 16
125-25	PB08M	HEX BOLT M6-1 X 20
125-26	PFB13M	FLANGE BOLT M4-.7 X 8
125-27	PW03M	FLAT WASHER 6MM
125-28	PH7589028	RESAW FENCE 640MM ALUMINUM
125-29	PH7587029	FENCE BASE PLATE
125-30	P0514X2B171-3	RESAW FENCE END PLATE
126	P0514X2126	TABLE 27 X 19"
127	P0513X127	TABLE INSERT
128	P0513X128	TABLE PIN
129	PCAP50M	CAP SCREW M5-.8 X 10
130	PW02M	FLAT WASHER 5MM
131	P0514X131	GUIDE POST COVER
132	P0514X2132	STEP SCREW
133	P0513X140	SLIDING COVER
134	P0513X141	FIBER FLAT WASHER
143	P0513X146	GUIDE POST HANDWHEEL

REF	PART #	DESCRIPTION
144	PCAP02M	CAP SCREW M6-1 X 20
152	P0514X152	UPPER BLADE GUIDE ASSEMBLY
152-1	PCAP01M	CAP SCREW M6-1 X 16
152-2	P0513X150-2	GUIDE POST CONNECTOR
152-3	PSS01M	SET SCREW M6-1 X 10
152-4	P0513X150-4	BRACKET ROD
152-5	P0513X150-5	UPPER BLADE GUIDE BRACKET
152-6	P0513X150-6	BIAS SHAFT
152-7	PR05M	EXT RETAINING RING 15MM
152-8	P6202ZZ	BALL BEARING 6202ZZ
152-9	P0513X150-9	BEARING BUSHING
152-10	PCAP48M	CAP SCREW M6-1 X 35
152-11	P0513X150-11	ADJUSTMENT ROD
153	P0514X153	LOWER BLADE GUIDE ASSEMBLY
153-5	P0513X151-5	GUIDE BRACKET CONNECTOR
153-6	PCAP01M	CAP SCREW M6-1 X 16
153-7	P0513X151-7	BIAS SHAFT
153-8	PR05M	EXT RETAINING RING 15MM
153-9	P6202ZZ	BALL BEARING 6202ZZ
153-10	P0513X151-10	BEARING BUSHING
153-11	PCAP48M	CAP SCREW M6-1 X 35
154	P0513X152	MITER GAUGE ASSEMBLY
176	PCAP84M	CAP SCREW M10-1.5 X 35
177	PLW06M	LOCK WASHER 10MM
178	PW04M	FLAT WASHER 10MM
179	PBHS20M	BUTTON HD CAP SCR M8-1.25 X 30
180	PLW04M	LOCK WASHER 8MM
181	PW01M	FLAT WASHER 8MM

G0514X2 & G0514X3 Labels



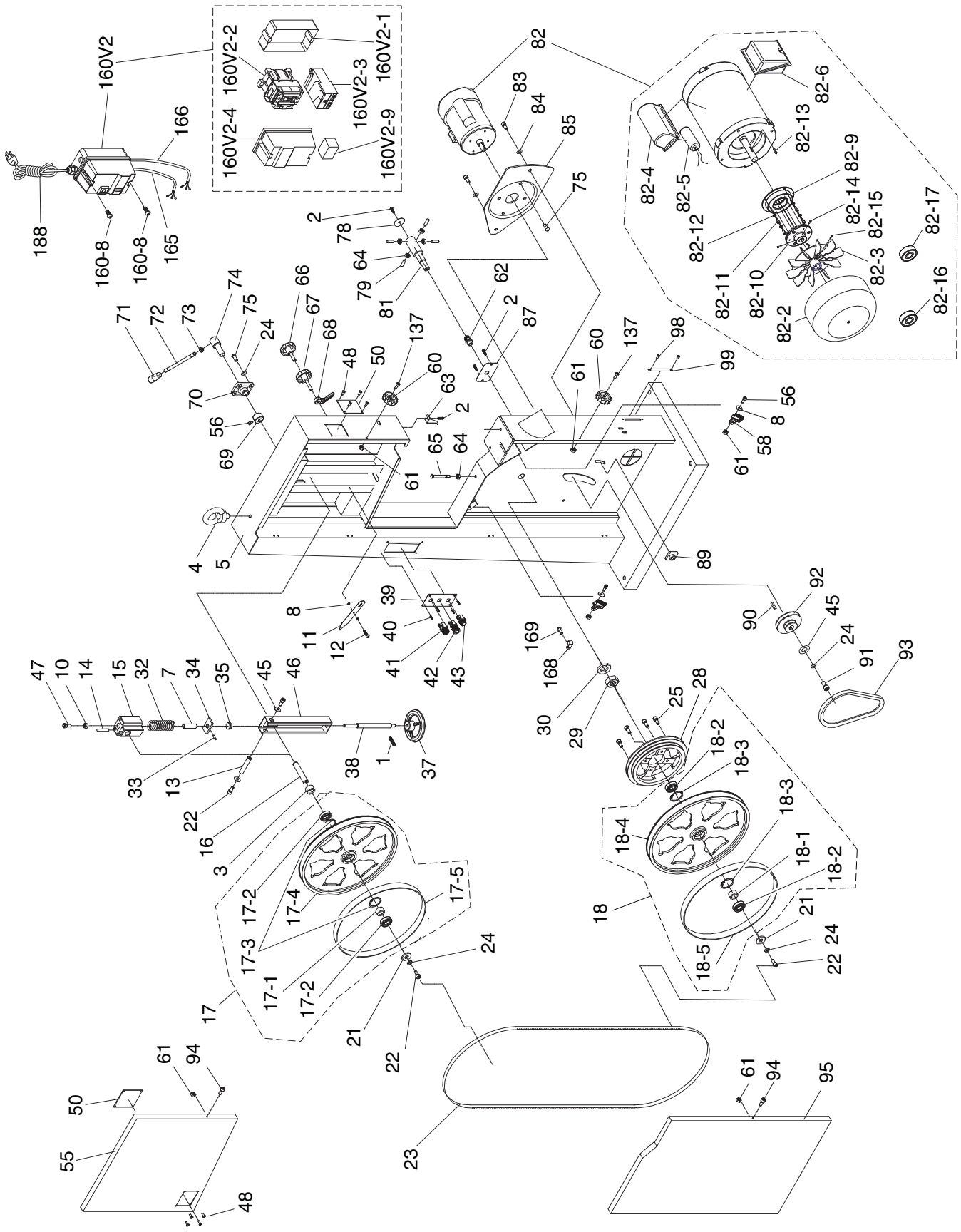
REF	PART #	DESCRIPTION
201	P0514X2201	MODEL NUMBER LABEL (G0514X2)
201	P0514X3201	MODEL NUMBER LABEL (G0514X3)
202	G8589	GRIZZLY NAMEPLATE LARGE
203	PLABEL-11	SAFETY GLASSESS LABEL
204	PLABEL-20	OPEN DOOR HAZARD LABEL
205	P0513X205	SCALE DIRECTIONS LABEL
206	PLABEL-12	READ MANUAL LABEL
207	PLABEL-14	ELECTRICITY LABEL
208	PLABEL-19	BLADE HAZARD LABEL

REF	PART #	DESCRIPTION
209	PLABEL-21	BLADE MOVING/ADJUSTING LABEL
210	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT
211	H7942	EXTREME SERIES NAMEPLATE
212	PPAINT-11	GRIZZLY PUTTY TOUCH-UP PAINT
213	PLABEL-18	DISCONNECT BANDSAW LABEL
214	PLABEL-20	OPEN DOOR HAZARD LABEL
215	P0513X214	BLADE TENSION LABEL
216	P0514X2216	MACHINE ID LABEL (G0514X2)
216	P0514X3216	MACHINE ID LABEL (G0514X3)

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

G0514X2B Main

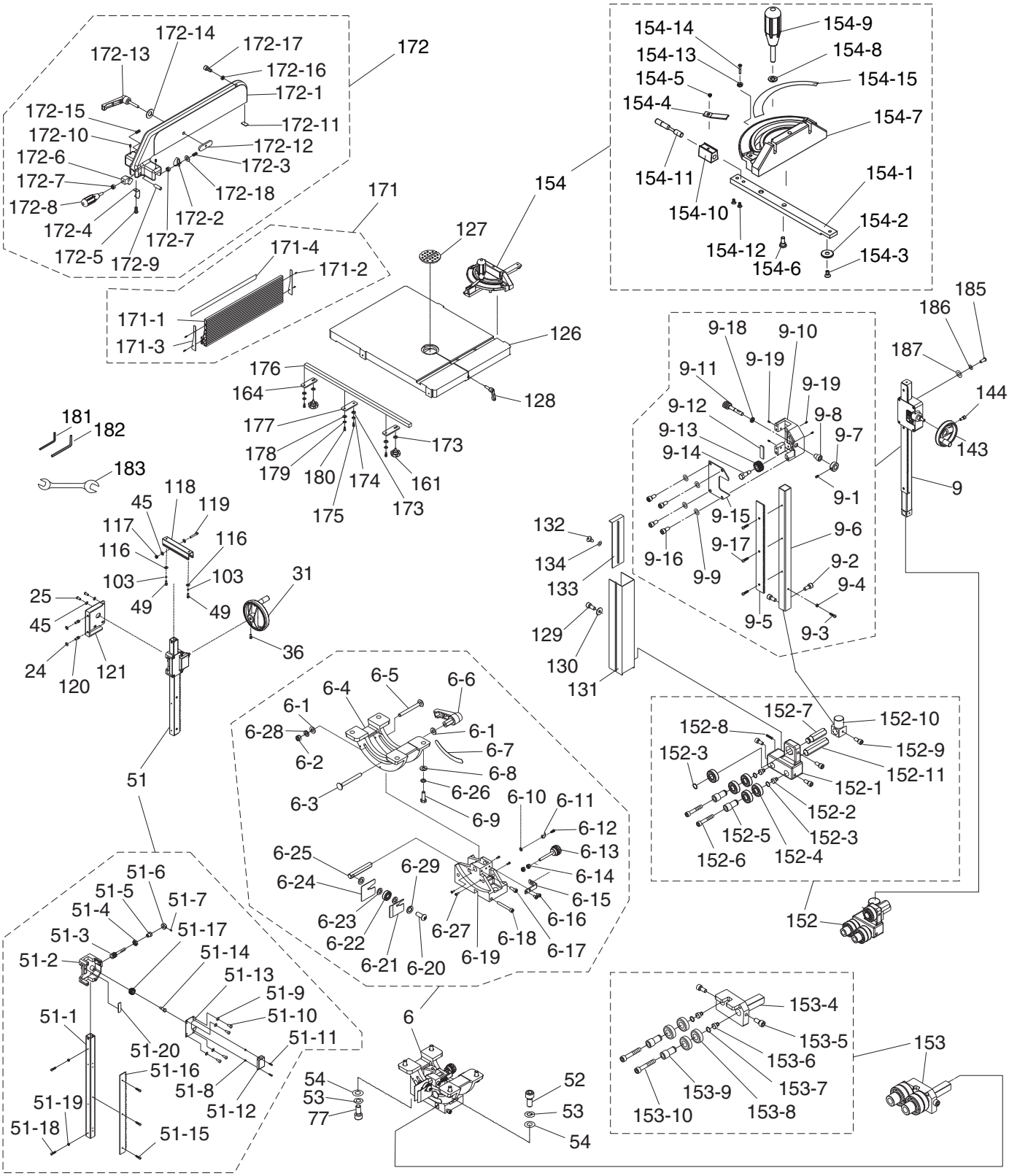


G0514X2B Main Parts List

REF	PART #	DESCRIPTION
1	PSS01M	SET SCREW M6-1 X 10
2	PFS07M	FLANGE SCREW M5-.8 X 10
3	P0513X003	BUSHING
4	P0513004	LIFTING EYE BOLT M10-1.5
5	P0514X2005	MACHINE BODY
7	P0513X007	BUSHING
8	PW03M	FLAT WASHER 6MM
10	PN01M	HEX NUT M6-1
11	P0513011	TENSION POINTER
12	P0513012	STEP SCREW M4-.7 X 5
13	P0513013	SLEEVE
14	PRP91M	ROLL PIN 5 X 35
15	P0513015	UPPER WHEEL SHAFT HINGE
16	P0513016	UPPER WHEEL SHAFT
17	P0514X2B017	UPPER WHEEL ASSEMBLY
17-1	P0513017	BUSHING
17-2	P6204-2RS	BALL BEARING 6204 2RS
17-3	PR25M	INT RETAINING RING 47MM
17-4	P0514X019	UPPER WHEEL 19"
17-5	T23072	URETHANE TIRE (PAIR)
18	P6204-2RS	LOWER WHEEL ASSEMBLY
18-1	P0513017	BUSHING
18-2	P6204-2RS	BALL BEARING 6204 2RS
18-3	PR25M	INT RETAINING RING 47MM
18-4	P0514X027	WHEEL LOWER 19"
18-5	T23072	URETHANE TIRE (PAIR)
21	PW01M	FLAT WASHER 8MM
22	PCAP11M	CAP SCREW M8-1.25 X 16
23	P0514023	BLADE 6TPI HOOK 143"
24	PLW04M	LOCK WASHER 8MM
25	PCAP14M	CAP SCREW M8-1.25 X 20
28	P0514X2028	IDLER PULLEY
29	PN32	HEX NUT 1-14
30	PLW09	LOCK WASHER 1"
32	P0513032	COMPRESSION SPRING 7 X 8 X 90
33	PRP02M	ROLL PIN 3 X 16
34	P0513034	SPRING BASE PLATE
35	P51201	THRUST BEARING 51201
37	P0513037	TENSION HANDWHEEL
38	P0513038	ADJUSTING SHAFT
39	P0514X039	CONTROL PANEL
40	PHTEK15M	TAP SCREW M4 X 10
41	P0514X041	KEYED POWER SWITCH
42	P0514X043	ON BUTTON
43	P0514X042	OFF BUTTON
45	PWF08M	FENDER WASHER 8MM
46	P0513046	UPPER WHEEL SLIDING BRACKET
47	PCAP168M	CAP SCREW M6-1 X 90
48	PRIV006M	STEEL BLIND RIVET 3 X 10MM
50	P0513050	CLEAR WINDOW
55	P0514055	UPPER WHEEL COVER
56	PCAP06M	CAP SCREW M6-1 X 25
58	P0513058	WHEEL BRUSH
60	P0513060	STAR HANDLE
61	PLN03M	LOCK NUT M6-1
62	P0513062	STRAIN RELIEF 16MM
63	P0513063	HEIGHT POINTER

REF	PART #	DESCRIPTION
64	PN03M	HEX NUT M8-1.25
65	PB124M	HEX BOLT M8-1.25 X 90
66	P0513066	KNOB BOLT M10-1.5 X 20
67	P0513067	KNOB BOLT M10-1.5 X 53
68	P0513068	THREADED HANDLE 10MM
69	P0513069	CAM
70	P0513070	HUB BRACKET
71	P0513071	KNOB
72	P0513072	LEVER
73	PN09M	HEX NUT M12-1.75
74	P0513074	LEVER HUB
75	PBHS22M	BUTTON HD CAP SCR M8-1.25 X 20
78	P0513078	SHAFT END CAP
79	PSS09M	SET SCREW M8-1.25 X 20
81	P0514X2081	LOWER WHEEL SHAFT
82	P0514X2B082	MOTOR 3HP 220V 1PH W/BRAKE
82-2	P0514X2B082-2	MOTOR FAN COVER
82-3	P0514X2B082-3	MOTOR FAN
82-4	P0514X2B082-4	R CAPACITOR COVER
82-5	P0514X2B082-5	R CAPACITOR 50M 400V RUI JUN
82-6	P0514X2B082-6	MOTOR JUNCTION BOX
82-9	P0514X2B082-9	MOTOR MAGNETIC BRAKE
82-10	P0514X2B082-10	BRAKE SHOE
82-11	PCAP26M	CAP SCREW M6-1 X 12
82-12	PLW03M	LOCK WASHER 6MM
82-13	PK23M	KEY 5 X 5 X 25
82-14	PCAP24M	CAP SCREW M5-.8 X 16
82-15	PS06M	PHLP HD SCR M5-.8 X 20
82-16	P0514X2B082-16	FRONT MOTOR BEARING
82-17	P0514X2B082-17	REAR MOTOR BEARING
83	PB32M	HEX BOLT M10-1.5 X 25
84	PLW06M	LOCK WASHER 10MM
85	P0513085	MOTOR MOUNT PLATE
87	P0513087	PLATE
89	P0513089	GUIDE KEY
90	PK15M	KEY 5 X 5 X 35
91	PB81M	HEX BOLT M8-1.25 X 20 LH
92	P0514X092	MOTOR PULLEY
93	PVA42	V-BELT A42
94	PCAP04M	CAP SCREW M6-1 X 10
95	P0514X095	LOWER WHEEL COVER
98	PFB08M	FLANGE BOLT M5-.8 X 10
99	P0514X2B099	COVER
137	PCAP02M	CAP SCREW M6-1 X 20
160V2	P0514X2B160V2	MAG SWITCH ASSEMBLY V2.05.11
160V2-1	P0514X2B160V2-1	SWITCH BACK COVER
160V2-2	P0514X2B160V2-2	CONTACTOR SDE MA-18 220V
160V2-3	P0514X2B160V2-3	OL RELAY SDE RA-20 12-18A
160V2-4	P0514X2B160V2-4	SWITCH FRONT COVER
160-8	PFS07M	FLANGE SCREW M5-.8 X 10
160V2-9	P0514X2B160V2-9	RECTIFIER PU-23-2
165	P0514X165	CONTROL CORD 16G 4W
166	P0514X166	MOTOR CORD 14G 5W
168	P0514X168	CORD CLAMP
169	PFS12M	FLANGE SCREW M5-.8 X 12
188	P0514X182	POWER CORD 14G 3W 6-15

G0514X2B Fence & Guides



G0514X2B Fence & Guides Parts List

REF	PART #	DESCRIPTION
6	P0514X2006	TRUNNION ASSEMBLY
6-1	PWF08M	FENDER WASHER 8MM
6-2	PLN04M	LOCK NUT M8-1.25
6-3	PCB10M	CARRIAGE BOLT M8-1.25 X 85
6-4	P0513X2162	TRUNNION
6-5	PCB23M	CARRIAGE BOLT M8-1.25 X 80
6-6	P0513118	LOCK HANDLE
6-7	P0513X2165	ANGLE SCALE
6-8	PW01M	FLAT WASHER 8MM
6-9	PB07M	HEX BOLT M8-1.25 X 25
6-10	PW05M	FLAT WASHER 4MM
6-11	P0513120	TILT POINTER
6-12	PS17M	PHLP HD SCR M4-.7 X 6
6-13	P0513109	ADJUSTMENT KNOB BOLT M6-1
6-14	PN01M	HEX NUT M6-1
6-15	P0513X2174	L-BRACKET
6-16	PFH01M	FLAT HD SCR M5-.8 X 15
6-17	PCAP01M	CAP SCREW M6-1 X 16
6-18	PCAP37M	CAP SCREW M6-1 X 50
6-19	P0513X2178	TRUNNION SUPPORT BRACKET
6-20	PBHS19M	BUTTON HD CAP SCR M10-1.5 X 30
6-21	P0513X2181	RIGHT CLAMP PLATE
6-22	P6000ZZ	BALL BEARING 6000ZZ
6-23	PW04M	FLAT WASHER 10MM
6-24	P0513X2184	LEFT CLAMP PLATE
6-25	P0513X2185	ADJUSTMENT BLOCK
6-26	PLW04M	LOCK WASHER 8MM
6-27	PCAP97M	CAP SCREW M5-.8 X 6
6-28	PLW04M	LOCK WASHER 8MM
6-29	PLW06M	LOCK WASHER 10MM
9	P0514X2009	UPPER GUIDE POST ASSEMBLY
9-1	PSS07M	SET SCREW M5-.8 X 5
9-2	PCAP01M	CAP SCREW M6-1 X 16
9-3	PS38M	PHLP HD SCR M4-.7 X 10
9-4	PN04M	HEX NUT M4-.7
9-5	P0514X2009-5	RACK
9-6	P0513X146	GUIDE POST
9-7	P0514X145	LOCK COLLAR
9-8	P0513X130	BUSHING
9-9	PLW04M	LOCK WASHER 8MM
9-10	P0513X133	GUIDE POST BRACKET
9-11	P0513X134	WORM SHAFT
9-12	P0513X135	FIXED PLATE
9-13	P0513X122	GEAR 15T
9-14	P0514X096	GEAR STEP BOLT
9-15	P0514X077	BRACKET COVER
9-16	PCAP11M	CAP SCREW M8-1.25 X 16
9-17	PFH31M	FLAT HD SCR M4-.7 X 8
9-18	P0514X052	BUSHING
9-19	P0514X2009-19	BRACKET SET SCREW PLASTIC
24	PLW04M	LOCK WASHER 8MM
25	PCAP14M	CAP SCREW M8-1.25 X 20
31	P0514X2031	TABLE TILT HANDWHEEL

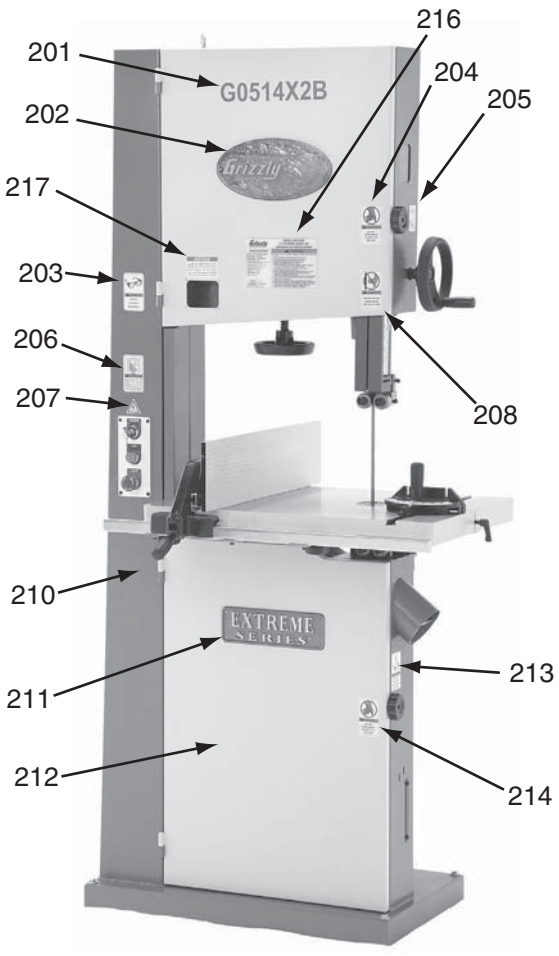
REF	PART #	DESCRIPTION
36	PCAP06M	CAP SCREW M6-1 X 25
45	PWF08M	FENDER WASHER 8MM
49	PCAP04M	CAP SCREW M6-1 X 10
51	P0514X2051	TABLE TILT BRACKET ASSEMBLY
51-1	P0566243	SQUARE TUBE
51-2	P0566213	GUIDE BRACKET
51-3	P0566225	WORM SHAFT
51-4	PN05M	HEX NUT M16-1.5
51-5	P0566230	BUSHING
51-6	P0566231	LOCK COLLAR 22 X 10 X 10MM
51-7	PSS07M	SET SCREW M5-.8 X 5
51-8	PN06M	HEX NUT M5-.8
51-9	PLW04M	LOCK WASHER 8MM
51-10	PCAP11M	CAP SCREW M8-1.25 X 16
51-11	PFS07M	FLANGE SCREW M5-.8 X 10
51-12	P0566187	PINION GEAR COVER
51-13	P0566192	BRACKET COVER
51-14	P0566239	PINION GEAR STEP BOLT
51-15	PFH19M	FLAT HD SCR M4-.7 X 10
51-16	P0566242	RACK
51-17	P0566246	PINION GEAR 15T
51-18	PS38M	PHLP HD SCR M4-.7 X 10
51-19	PN04M	HEX NUT M4-.7
51-20	P0514X2051-20	FIXED PLATE
52	PCAP84M	CAP SCREW M10-1.5 X 35
53	PLW06M	LOCK WASHER 10MM
54	PW04M	FLAT WASHER 10MM
77	PCAP84M	CAP SCREW M10-1.5 X 35
103	PLW03M	LOCK WASHER 6MM
116	PW03M	FLAT WASHER 6MM
117	PLN04M	LOCK NUT M8-1.25
118	P0514X2118	SLIDING PLATE
119	PB30M	HEX BOLT M8-1.25 X 55
120	PCAP14M	CAP SCREW M8-1.25 X 20
121	P0514X2121	TRUNNION PLATE
126	P0514X2B126	TABLE
127	P0513X127	TABLE INSERT
128	P0513X128	TABLE PIN
129	PCAP50M	CAP SCREW M5-.8 X 10
130	PW02M	FLAT WASHER 5MM
131	P0514X131	GUIDE POST COVER
132	P0514X132	STEP SCREW
133	P0513X140	POST COVER SLIDING PLATE
134	P0513X141	FIBER FLAT WASHER
143	P0513X146	ELEVATION HANDWHEEL
144	PCAP02M	CAP SCREW M6-1 X 20
152	P0514X152	UPPER BLADE GUIDE ASSEMBLY
152-1	P0513X150-5	UPPER GUIDE BRACKET
152-2	P0513X150-6	BIAS SHAFT
152-3	PR05M	EXT RETAINING RING 15MM
152-4	P6202ZZ	BALL BEARING 6202ZZ
152-5	P0513X150-9	BEARING BUSING
152-6	PCAP48M	CAP SCREW M6-1 X 35

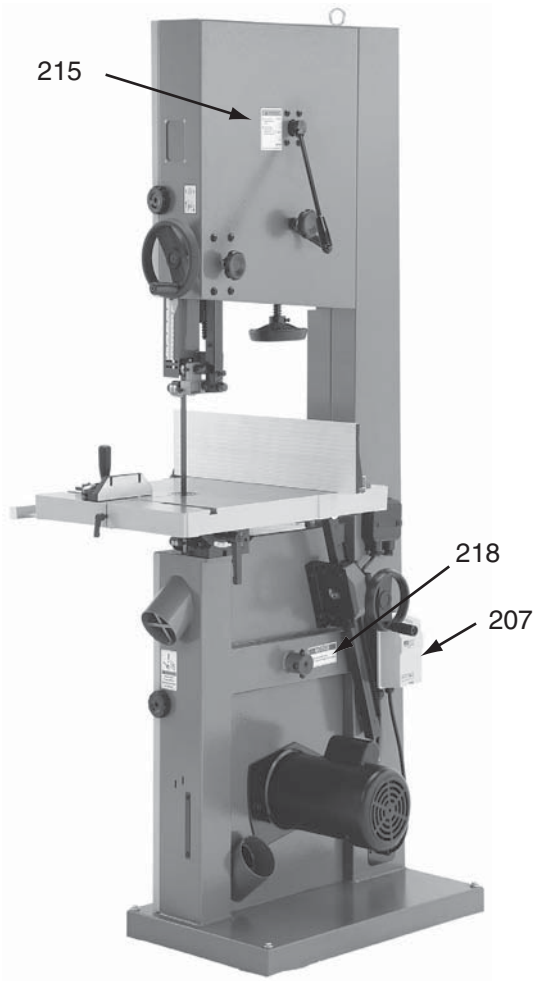
G0514X2B Fence & Guides Parts List

REF	PART #	DESCRIPTION
152-7	P0513X150-11	ADJUSTMENT SHAFT
152-8	PSS01M	SET SCREW M6-1 X 10
152-9	PCAP01M	CAP SCREW M6-1 X 16
152-10	P0513X150-2	GUIDE POST CONNECTOR
152-11	P0513X150-4	BRACKET ROD
153	P0514X153	LOWER BLADE GUIDE ASSEMBLY
153-4	P0513X151-5	LOWER GUIDE BRACKET
153-5	PCAP01M	CAP SCREW M6-1 X 16
153-6	P0513X151-7	BIAS SHAFT
153-7	PR05M	EXT RETAINING RING 15MM
153-8	P6202ZZ	BALL BEARING 6202ZZ
153-9	P0513X151-10	BEARING BUSHING
153-10	PCAP48M	CAP SCREW M6-1 X 35
154	P0513X152	MITER GAUGE ASSEMBLY
154-1	P0513X152	T-SLOT BAR
154-2	P0513X2B152-2	GUIDE PIECE
154-3	PFH04M	FLAT HD SCR M6-1 X 8
154-4	P0513X152	ALIGNMENT PLATE
154-5	P0513X2B152-5V2	PHLP HD SCR 10-24 X 3/16
154-6	P0513X2B152-6	SHOULDER SCREW
154-7	P0513X152	MITER GAUGE BODY
154-8	PW01M	FLAT WASHER 8MM
154-9	P0513X152	MITER GAUGE HANDLE
154-10	P0513X152	ALIGNMENT BLOCK
154-11	P0513X152	ALIGNMENT PIN
154-12	P0513X2B152-5V2	PHLP HD SCR 10-24 X 3/16
154-13	PN04M	HEX NUT M4-.7
154-14	PS56M	PHLP HD SCR M4-.7 X 16
154-15	P0513X2B152-15	MITER GAUGE SCALE
161	P0513X2B153	KNOB SCREW M8-1.25 X 20
164	P0513X2B154	OUTER RAIL PLATE
171	P0514X2B171	RESAW FENCE ASSEMBLY
171-1	P0514X2B171-1	RESAW FENCE 590MM ALUMINUM
171-2	PHTEK3M	TAP SCREW M3.5 X 8
171-3	P0514X2B171-3	RESAW FENCE END PLATE

REF	PART #	DESCRIPTION
171-4	P0514X2B171-4	SCALE
172	P0514X2B172	FENCE ASSEMBLY
172-1	P0514X2B172-1	FENCE
172-2	P0514X2B172-2	POINTER
172-3	PFS19M	FLANGE SCREW M5-.8 X 25
172-4	P0514X2B172-4	LOCK PLATE
172-5	PFS17M	FLANGE SCREW M4-.7 X 8
172-6	P0514X2B172-6	PIVOT BLOCK
172-7	PN03M	HEX NUT M8-1.25
172-8	P0514X2B172-8	HANDLE
172-9	P0514X2B172-9	LOCK ROD
172-10	P0514X2B172-10	STANDOFF SET SCREW PLASTIC
172-11	P0514X2B172-11	NYLON PAD
172-12	P0514X2B172-12	GUIDE KEY
172-13	P0514X2B172-13	LOCK HANDLE M8-1.25 X 45
172-14	PW01M	FLAT WASHER 8MM
172-15	PSS14M	SET SCREW M8-1.25 X 12
172-16	PN03M	HEX NUT M8-1.25
172-17	PCAP14M	CAP SCREW M8-1.25 X 20
172-18	PW01M	FLAT WASHER 8MM
173	PW01M	FLAT WASHER 8MM
174	PLW04M	LOCK WASHER 8MM
175	PCAP14M	CAP SCREW M8-1.25 X 20
176	P0514X2B176	FENCE RAIL
177	P0513X2B162	INNER RAIL PLATE
178	PW03M	FLAT WASHER 6MM
179	PLW03M	LOCK WASHER 6MM
180	PCAP02M	CAP SCREW M6-1 X 20
181	PAW05M	WRENCH HEX 5MM
182	PAW08M	WRENCH HEX 8MM
183	PWR1013	WRENCH 10 X 13
185	PBHS20M	BUTTON HD CAP SCR M8-1.25 X 30
186	PLW04M	LOCK WASHER 8MM
187	PWF08M	FENDER WASHER 8MM

G0514X2B Labels





REF	PART #	DESCRIPTION
201	P0514X2B201	MODEL NUMBER LABEL
202	G8589	GRIZZLY NAMEPLATE LARGE
203	PLABEL-11	SAFETY GLASSES LABEL
204	PLABEL-20	OPEN DOOR HAZARD LABEL
205	P0513X204	GUARD ADJUSTMENT LABEL
206	PLABEL-12	READ MANUAL LABEL
207	PLABEL-14	ELECTRICITY LABEL
208	PLABEL-19	BLADE HAZARD LABEL
210	PPAINT-1	GRIZZLY GREEN TOUCH-UP PAINT

REF	PART #	DESCRIPTION
211	H7942	EXTREME SERIES NAMEPLATE
212	PPAINT-11	GRIZZLY PUTTY TOUCH-UP PAINT
213	PLABEL-18	DISCONNECT BANDSAW LABEL
214	PLABEL-20	OPEN DOOR HAZARD LABEL
215	P0513X214	TENSION ADJUSTMENT LABEL
216	P0514X2B216	MACHINE ID LABEL
217	P0513X205	SCALE DIRECTIONS LABEL
218	P0566301	TABLE LOCK LABEL

⚠WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine MUST maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, REPLACE that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____ Invoice # _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

2. Which of the following magazines do you subscribe to?

____ Cabinetmaker & FDM
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____Yes _____No

8. Would you recommend Grizzly Industrial to a friend? _____Yes _____No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____Yes _____No

10. Comments: _____

_____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number,'' which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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